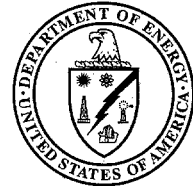


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Institutional Control Plan for the Idaho Nuclear Technology and Engineering Center, Waste Area Group 3, Operable Unit 3-13



Idaho National Engineering and Environmental Laboratory

**Institutional Control Plan for the Idaho Nuclear
Technology and Engineering Center, Waste Area
Group 3, Operable Unit 3-13**

October 2002

Prepared for the
U.S. Department of Energy
Idaho Operations Office

ABSTRACT

This Institutional Control Plan documents how the Idaho National Engineering and Environmental Laboratory (INEEL) will comply with the Record of Decision mandated Institutional Controls for sites that make up Waste Area Group (WAG) 3, Operable Unit (OU) 3-13. Institutional controls (ICs) will preserve the underlying assumptions of the Remedial Investigation/Feasibility Study developed for WAG 3, OU 3-13 that will protect human health and the environment. The institutional controls are selected remedies for certain “No Further Action” sites and are part of the selected remedies for certain other release sites. This Institutional Control Plan provides overviews of programmatic work procedures that will be used by INEEL personnel and contractors to institute and inspect the mandated institutional controls for WAG 3, OU 3-13. The INEEL Comprehensive Facilities and Land Use Plan will complement and support this Institutional Control Plan by providing current and projected facility and land uses.

Institutional controls specified in the WAG 3, OU 3-13 Record of Decision are based upon the United States Department of Energy control of the INEEL for a 100-year time period (year 2095) and beyond. The institutional controls could include visible access restrictions, procedures to control activities and unauthorized access, publishing surveyed boundaries in the INEEL Comprehensive Facilities and Land Use Plan, notices to affected stakeholders, and property lease and transfer requirements. This Institutional Control Plan also provides an approach to soils management at OU 3-13 for disturbed soils during the institutional control period for the facility.

SUMMARY

On May 3, 1999, the United States Environmental Protection Agency Region 10 issued the final policy on the use of institutional controls at federal facilities (EPA 1999). The policy establishes the measures that ensure the short- and long-term effectiveness of institutional controls that protect human health and the environment at federal facility sites undergoing remedial action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and/or corrective action pursuant to the Resource Conservation and Recovery Act.

The institutional controls could include

- Visible access restrictions
 - Warning signs
 - Fences, barriers, or permanent markers
- Procedures to control activities through
 - Idaho National Engineering and Environmental Laboratory Comprehensive Facilities and Land Use Plan
 - Public notices
 - Department of Energy directives
 - Radiological Work Permits and general work orders
 - Personnel training
 - Soil disturbance notification process
- Procedures to prohibit unauthorized access
- Publishing of surveyed boundaries and controls
- Notice to affected stakeholders
- Property lease and transfer regulatory requirements.

An important aspect of institutional controls for the control of activities at Waste Area Group (WAG) 3, Operable Unit (OU) 3-13, will be proper management of soil disturbances at CERCLA controlled areas. A soil management strategy is presented in this Institutional Control Plan and provides

an approach to soil management options for WAG 3 soils that could be disturbed after the approval date of the WAG 3, OU 3-13 Record of Decision.

The information in this Institutional Control Plan will be updated as new information regarding sites becomes available, as other requirements related to institutional controls are specified in other post-Record of Decision documentation, when institutional controls change or are terminated, or when controlled property is transferred or leased.

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ACRONYMS

AEA	Atomic Energy Act
ALARA	as low as reasonably achievable
BLM	Bureau of Land Management
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFLUP	Comprehensive Facilities and Land Use Plan
COC	contaminants of concern
COPC	contaminants of potential concern
CRS	Certified Realty Specialist
CX	categorical exclusion
D&D&D	deactivation, decontamination, and decommissioning
DOE	Department of Energy
DOE-ID	Department of Energy Idaho Operations Office
DOI	Department of the Interior
EA	environmental assessment
EC	environmental checklist
EIS	environmental impact statement
EPA	Environmental Protection Agency
FFA/CO	Federal Facility Agreement and Consent Order
FS	feasibility study
F&W	Fish and Wildlife Service
GSA	General Services Administration
HAZWOPER	Hazardous Waste Operations and Emergency Response
HI	hazard index
HLLW	high-level liquid waste
HWMA	Hazardous Waste Management Act

IC	institutional control
ICDF	INEEL CERCLA Disposal Facility
ICP	Institutional Control Plan
ICPP	Idaho Chemical Processing Plant
IDEQ	Idaho Department of Environmental Quality
IDHW	Idaho Department of Health and Welfare
IDW	investigation-derived waste
INEEL	Idaho National Engineering and Environmental Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
MCL	maximum contaminant level
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NFA	No Further Action
NOD	Notice of Disturbance
NPL	National Priorities List
O&M	operations and maintenance
OSHA	Occupational Safety and Health Administration
OU	operable unit
RCRA	Resource Conservation and Recovery Act
RI/FS	remedial investigation/feasibility study
ROD	Record of Decision
RWP	radiological work permit
RWT	radiological worker training
SFE	Stored Fuel Exterior
SNF	spent nuclear fuel
SRPA	Snake River Plain Aquifer

SSSTF	Staging, Storage, Sizing, and Treatment Facility
VPP	Voluntary Protection Program
WAC	Waste Acceptance Criteria
WAG	waste area group
WCF	Waste Calcining Facility

Institutional Control Plan for the Idaho Nuclear Technology and Engineering Center, Waste Area Group 3, Operable Unit 3-13

1. INTRODUCTION/PURPOSE

On May 3, 1999, the United States Environmental Protection Agency (EPA) Region 10 issued the final policy on the use of institutional controls (ICs) at federal facilities (EPA 1999). The policy establishes the measures that ensure the short- and long-term effectiveness of ICs that protect human health and the environment at federal facility sites undergoing remedial action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 USC §9601, et seq.) and/or corrective action pursuant to the Resource Conservation and Recovery Act (RCRA) (42 USC §6901 et seq.). The policy requires that an initial IC monitoring report on the status of the ICs be submitted to the Idaho Department of Health and Welfare (IDHW)-Idaho Department of Environmental Quality (IDEQ) and the EPA 6 months following the signing of any decision documents, such as a CERCLA Record of Decision (ROD) and/or a RCRA Statement of Basis. The policy requires IC monitoring reports be submitted at least annually thereafter (DOE-ID 2001, 2002). The policy allows a facility to submit one IC monitoring report to cover all operable units (OUs) and all ICs at the entire facility, subject to the approval of EPA and the state. The EPA Region 10 policy identifies that after a facility's comprehensive facility-wide approach is well established and the facility has demonstrated its effectiveness, the frequency of future IC monitoring reports may be modified subject to approval by EPA and the state. The INEEL is planning to develop a facility-wide IC monitoring plan and subsequent reports, in accordance with the EPA policy, and the OU 3-13 ICs will be integrated into that plan.

This Institutional Control Plan (ICP) documents how the U.S. Department of Energy (DOE) -managed Idaho National Engineering and Environmental Laboratory (INEEL) will comply with the ROD-mandated ICs for the facility. The Idaho Nuclear Technology and Engineering Center (INTEC), located in the south-central portion of INEEL, is designated as Waste Area Group (WAG) 3, Operable Unit (OU) 3-13 and was formerly known as the Idaho Chemical Processing Plant (ICPP). Institutional controls will preserve the underlying assumptions of the Remedial Investigation/Feasibility Study (RI/FS) developed for WAG 3, OU 3-13, that will protect human health and the environment. This ICP provides both inspection methodologies and overviews of programmatic work control procedures that will be used by INEEL personnel and contractors to institute and inspect the mandated ICs at WAG 3, OU 3-13. The INEEL Comprehensive Facilities and Land Use Plan (CFLUP) will complement and support this ICP by providing current and projected facility and land uses.

This ICP will become part of the INEEL Site-Wide ICP that is currently under development. Upon completion of the Site Wide ICP, any documentation required to include this plan into the Site-Wide ICP will be prepared and submitted to DOE and the appropriate agencies for approval. The information in this ICP will be updated as new information regarding sites becomes available, as requirements related to ICs are specified in other post-ROD documentation, when ICs change or are terminated, or when IC-controlled property is transferred or leased. When a facility-wide ICP for the INEEL is developed and approved by the Agencies, this ICP will be superceded by that document.

2. BACKGROUND

This section addresses the background of both INEEL and INTEC. A brief history of INTEC and the INEEL Comprehensive Facility Land Use Plan is also given. Finally, the release site locations of WAG 3, OU 3-13 are shown.

2.1 INEEL/INTEC Background

The INEEL is a government facility managed by the DOE, located 51.5 km (32 mi) west of Idaho Falls, Idaho, and occupies 2,305 km² (890 mi²) of the northeastern portion of the Eastern Snake River Plain (see Figure 2-1) (DOE-ID 1997a).

Facilities at the INEEL are primarily dedicated to nuclear research, development, and waste management. Surrounding areas are for multipurpose use and are managed by the U.S. Bureau of Land Management (BLM). A 1,295-km² (500-mi²) buffer zone used for cattle and sheep grazing surrounds the developed area within the INEEL. Communities nearest to the INTEC are Atomic City (south), Arco (west), Butte City (west), Howe (northwest), Mud Lake (northeast), and Terreton (northeast). In the counties surrounding the INEEL, approximately 45% is agricultural land, 45% is open land, and 10% is urban. Sheep, cattle, hogs, and poultry are produced; potatoes, sugar beets, wheat, barley, oats, forage, and seed crops are cultivated. Private individuals and the U.S. Government own most of the land surrounding the INEEL (DOE-ID 1997a).

Fences and security personnel control public access to the INEEL. State Highways 22, 28, and 33 cross the northeastern portion of the INEEL approximately 32.2 km (20 mi) from INTEC, and U.S. Highways 20 and 26 cross the southern portion approximately 8 km (5 mi) from INTEC. A total of 145 km (90 mi) of paved highways pass through the INEEL and are used by the general public (DOE-ID 1997a).

In 1989, the EPA proposed listing the INEEL on the National Priorities List (NPL) of the National Oil and Hazardous Substances Contingency Plan. The EPA issued a final ruling that listed the INEEL as a NPL site in November 1989 (54 FR 29820). As a result, the INEEL became subject to the requirements of CERCLA. The Federal Facility Agreement and Consent Order (FFA/CO) and associated action plan (DOE-ID 1991) were developed to establish the procedural framework and schedule for developing, prioritizing, implementing, and monitoring response actions at the INEEL in accordance with CERCLA, RCRA, and the Idaho Hazardous Waste Management Act (HWMA) (HWMA 1983).

To manage environmental investigations, the INEEL is divided into 10 WAGs. Identified contaminant release sites in each WAG were grouped into OUs to expedite the investigations and any required remedial actions. The INTEC, located in the south-central portion of the INEEL, is designated as WAG 3 (see Figure 2-1). The INTEC was subdivided into 13 OUs that were investigated for contaminant releases to environmental pathways. Within these 13 OUs, 101 release sites were identified. Of the 101 sites, 57 sites that will require ICs were included in the ROD for WAG 3, OU 3-13. Additionally, six “No Further Action” (NFA) sites requiring ICs were also included for a total of 63 sites (DOE-ID 1997a).

2.2 INTEC History

The INTEC began operating in 1952. The primary missions were reprocessing uranium for defense purposes and research and storage of spent nuclear fuel (SNF). Irradiated defense nuclear fuels were reprocessed to recover unused uranium. In 1992, the reprocessing mission was phased out. The current INTEC mission is receiving and temporarily storing SNF and radioactive wastes for future disposition (DOE-ID 1997a).

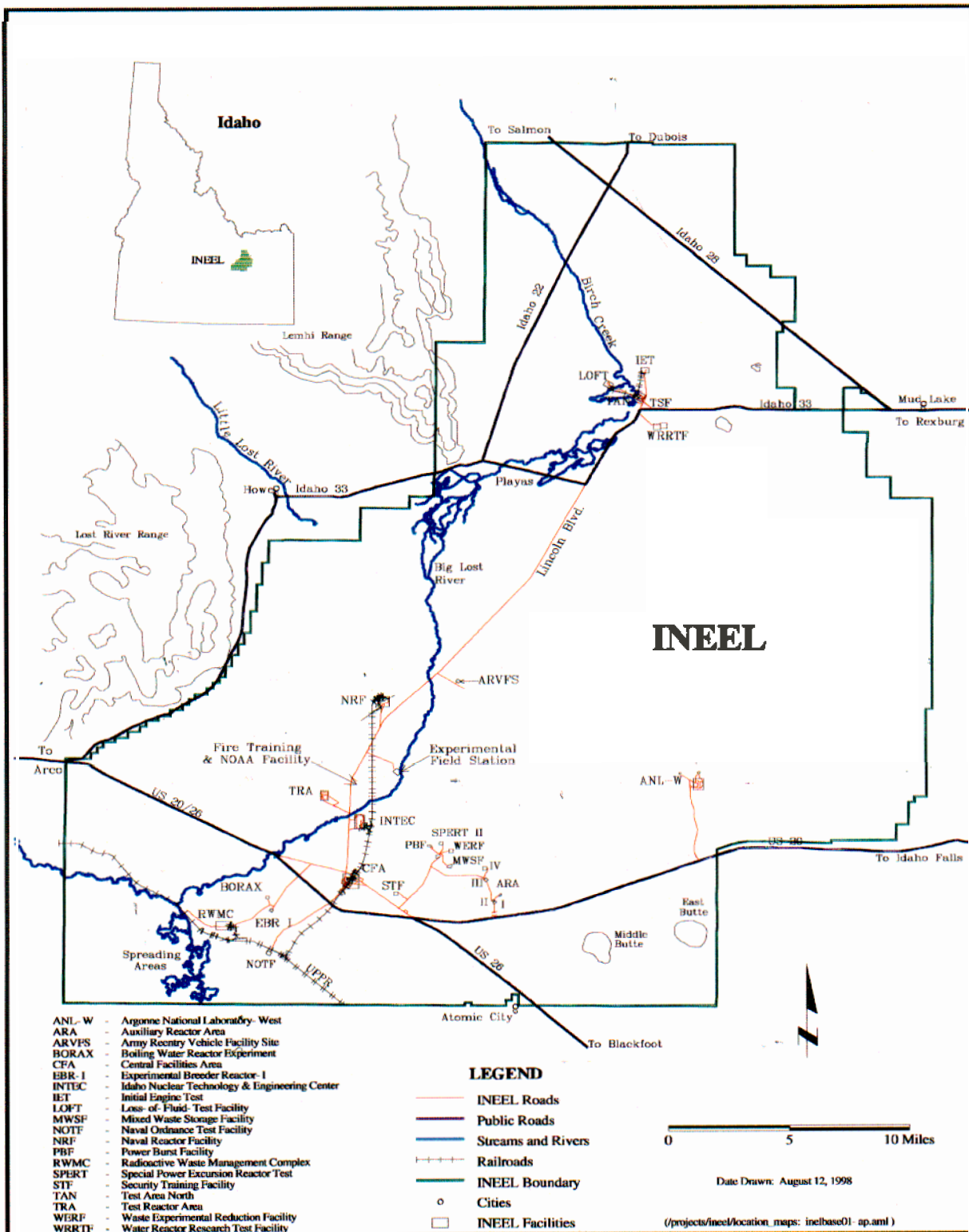


Figure 2-1. INEEL and INTEC location map.

In addition to reprocessing SNF, INTEC stabilized high-level liquid waste (HLLW) from fuel reprocessing through a process known as calcination. That processing was conducted in the Waste Calcining Facility (WCF) where radioactive HLLW was converted into a granular solid similar in consistency to sand. The New Waste Calcining Facility replaced the WCF in 1982. The calcined solids were transferred to large stainless steel structures encased in thick concrete vaults (bin sets). Calcining achieves an 8 to 1 volume reduction from liquid to solid. Although processing of nuclear fuel was terminated in 1992, calcination of the HLLW continued until it was completed in February 1998. Sodium-bearing wastes are still being processed.

Releases of radioactive and hazardous materials to the environment have occurred over the past decades due to accidents and intentional operational releases, such as discharge of radionuclide-contaminated wastewater beneath the INTEC via the former injection well. Although these operational releases fail to meet contemporary standards, past intentional discharges did meet rules and standards of the times.

In 1997, a Remedial Investigation/Baseline Risk Assessment (DOE-ID 1997a) was conducted to determine the comprehensive risks posed by past releases at WAG 3. That document addressed all known release sites. During the feasibility study (FS) and supplemental FS, the sites in OU 3-13 were further divided into seven major groups relating to media, similar contamination, or geographic proximity, plus the No Further Action (NFA) sites (DOE-ID 1997b, 1998a). The groups include

- Group 1—Tank Farm Soils
- Group 2—Soils Under Buildings and Structures
- Group 3—Other Surface Soils
- Group 4—Perched Water
- Group 5—Snake River Plain Aquifer (SRPA)
- Group 6—Buried Gas Cylinders
- Group 7—SFE-20 Hot Waste Tank System.

The information from the FS was used to develop the WAG 3, OU 3-13, Proposed Plan and ROD (DOE-ID 1998b, 1999). The ROD states the selected remedy for each release site within WAG 3, OU 3-13. ICs are included as part of the selected remedies for sites requiring remediation and NFA sites. See Table 2-1 for information on WAG 3 sites to be remediated and the NFA site. For information regarding the other identified release sites, refer to the WAG 3, OU 3-13, ROD (DOE-ID 1999).

A NFA site is a site that has a contaminant source or a potential contaminant source that meets either of the following criteria:

- The site poses a current unacceptable residential risk, i.e., greater than 1×10^{-4} or hazard index (HI) > 1 in the year 2000, but does not pose an unacceptable residential risk in the year 2095, i.e., less than 1×10^{-4} or $HI < 1$. (Radioactive decay will allow many sites that are currently unacceptable to decay to acceptable risk levels by the year 2095.)
- The site has contamination that exists at depths greater than 3.1 m (10 ft) below land surface and does not have an exposure route available under current site conditions.

Table 2-1. ROD-selected remedies for each release site.

Site ID	Group	Description	ROD Selected Remedy	Time Frame Of Controls ^a
CPP-01	3	Concrete settling basin E of CPP-603	Institutional controls, removal, and on-site disposal in the INEEL CERCLA Disposal Facility (ICDF)	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-02	2	Floor Drain W of CPP-603	Institutional controls with containment	100 years (Year 2095) with all containment caps being designed for 1000 years
CPP-03	3	Temporary Storage Area SE of CPP-603	Institutional controls, removal, and on-site disposal in the ICDF	100 year (Year 2095), ICDF cap will be designed for 1000 years
CPP-04	3	Contaminated Soil Area near CPP-603 Settling Tank	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-05	3	Contaminated Soil Area near CPP-603 Settling Basin	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-06	NFA	Trench east of CPP-603 Fuel Storage Basin	Institutional controls	100 years (Year 2095)
CPP-08	3	CPP-603 basin filter line failure	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-09	3	Soil contamination NE corner CPP-603 SB	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-10	3	CPP-603 plastic pipe break	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-11	3	CPP-603 sludge and water release	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-13	3	Pressurization of solid storage cyclone NE of CPP-603	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-14	3	Old Sewer Treatment Plant W of CPP-604	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-15	1	Solvent burner E. of CPP-605	Institutional controls with surface water control	10 years
CPP-16	1	Contaminated soil from leak in line from CPP WM-181 to PEW Evaporator	Institutional controls with surface water control	10 years
CPP-17	NFA	Soil storage area south of CPP Peach Bottom Fuel Storage Area	Institutional controls	100 years (Year 2095)

Table 2-1. (continued).

Site ID	Group	Description	ROD Selected Remedy	Time Frame Of Controls ^a
CPP-19	3	CPP-603 to CPP-604 line leak	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-20	1	CPP-604 Radioactive Waste Handling Area	Institutional controls with surface water control	10 years
CPP-22	NFA	Particulate air release south of CPP-603	Institutional controls	100 years (Year 2095)
CPP-23	5	CPP Injection well (MAH-FE-PL-304)	Institutional controls with monitoring and contingent remediation	100 years, at the end of 2095 MCLs will be met outside the INTEC fence
CPP-24	1	CPP Tank Farm Area bucket spill	Institutional controls with surface water control	10 years
CPP-25	1	Contaminated soil in the Tank Farm Area N of CPP-604	Institutional controls with surface water control	10 years
CPP-26	1	Contaminated soil in the Tank Farm Area from steam flush	Institutional controls with surface water control	10 years
CPP-27	1	Contaminated soil in the Tank Farm Area E of CPP-604	Institutional controls with surface water control	10 years
CPP-28	1	Contaminated soil in Tank Farm Area S of WM-181 near VB A-6	Institutional controls with surface water control	10 years
CPP-30	1	Contaminated soil in the Tank Farm Area near valve box B-9	Institutional controls with surface water control	10 years
CPP-31	1	Contaminated soil in Tank Farm Area S of tank WM-183	Institutional controls with surface water control	10 years
CPP-32	1	Contaminated soils in Tank Farm Area SW & NW of VB B-4	Institutional controls with surface water control	10 years
CPP-33	1	Contaminated soils in Tank Farm Area near WL-102 NE of CPP-604	Institutional controls with surface water control	10 years
CPP-34 A/B	3	Soil Storage Area in the NE corner of INTEC	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-35	3	CPP-633 decontamination spill	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-36	3	Transfer Line leak from CPP-633 to WL-102	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years

Table 2-1. (continued).

Site ID	Group	Description	ROD Selected Remedy	Time Frame Of Controls ^a
CPP-37A/B/C	3	Gravel Pits and Debris Landfill in/out of INTEC	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-41A	2 ^b	Fire Training Pits CPP-666 and CPP-663	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095) with all containment caps being designed for 1000 years
CPP-44	3	Grease Pit S of CPP-608	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-48	3	French Drain E of CPP-633	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-55	3	Mercury contamination area S of CPP-t-15	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-58	1	CPP PEW Evaporator overhead pipe spills	Institutional controls with surface water control	10 years
CPP-60	2	Paint Shop at CPP-645	Institutional controls with containment	100 years (Year 2095) with all containment caps being designed for 1000 years
CPP-67	3	CPP PERC Ponds #1 and #2	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-68	2 ^b	Abandoned gasoline tank CPP VES-UTI-652	Institutional controls, removal, and on-site disposal in the ICDF	100 years (Year 2095), with containment caps being designed for 1000 years
CPP-69	7	Hot Waste Tank	Institutional controls, removal, treatment and disposal in the ICDF	10 years
CPP-79	1	Tank Farm release near VB A-2	Institutional controls with surface water control	10 years
CPP-80	2	CPP-601 Vent Tunnel drain leak	Institutional controls with containment	100 years (Year 2095) with all containment caps being designed for 1000 years
CPP-83	4	Perched Water System at INTEC CPP 55-06	Institutional controls with aquifer recharge control	30 years, Sr-90 will decay
CPP-84	6	Buried gas cylinders	Institutional controls, removal, treatment and disposal	10 years
CPP-85	2	WCF Blower Corridor	Institutional controls with containment	100 years (Year 2095) with all containment caps being designed for 1000 years
CPP-86	2	CPP-602 Waste Trench Sump	Institutional controls with containment	100 years (Year 2095) with all containment caps being designed for 1000 years
CPP-87	2	CPP-604 VOG Blower cell sump and floor drain	Institutional controls with containment	100 years (Year 2095) with all containment caps being

Table 2-1. (continued).

Site ID	Group	Description	ROD Selected Remedy	Time Frame Of Controls ^a
				designed for 1000 years
CPP-88	NFA	Radiologically contaminated soil	Institutional controls	100 years (Year 2095)
CPP-89	2	CPP-604/605 tunnel excavation	Institutional controls with containment	100 years (Year 2095) with all containment caps being designed for 1000 years
CPP-90	NFA	CPP-708 ruthenium detection	Institutional controls	100 years (Year 2095)
CPP-91	3	CPP-633 blower pit drain	Institutional controls removal, and on-site disposal in the ICDF	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-92	3	Soil Boxes W of CPP-1617	Institutional controls, removal, and on-site disposal	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-93	3	Simulated calcine disposal trench	Institutional controls, removal, and on-site disposal	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-94	6	Buried gas cylinders	Institutional controls, removal, treatment and disposal	10 years
CPP-95	NFA	Airborne plume	Institutional controls	100 years (Year 2095)
CPP-96	1	Tank Farm interstitial soils	Institutional controls with surface water control	10 years
CPP-97	3	Tank Farm soil stockpiles	Institutional controls, removal, and on-site disposal	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-98	3	Tank Farm shoring boxes	Institutional controls, removal, and on-site disposal	100 years (Year 2095), ICDF cap will be designed for 1000 years
CPP-99	3	Boxed soil	Institutional controls, removal, and on-site disposal	100 years (Year 2095), ICDF cap will be designed for 1000 years

a. For contamination in excess of 3.1 m (10 ft) in depth, land use restrictions will apply beyond the 100-year time period.

b. These sites are planned to be remediated as part of Group 3 remediation activities.

- The site has a minor contaminant source, as qualitatively determined, that exists under a building, structure, or asphalt, and, therefore, does not have an exposure pathway as long as the building, structure, or asphalt remains intact.

The six identified NFA sites require ICs and 5-year remedy reviews to preserve the underlying assumptions developed in the RI/FS process and listed above. Additionally, review of these sites is necessary because continued operations of the INTEC may disturb or adversely impact the sites.

The 63 WAG 3, OU 3-13 sites that will require ICs, and the ROD-selected remedies and IC time frames associated with each are included in Table 2-1.

2.3 INEEL Comprehensive Facility and Land Use Plan

The INEEL Comprehensive Facility and Land Use Plan (CFLUP) provides guidance on facility and land use at the INEEL through the 100-year (year 2095) scenario, during which it is assumed that INEEL will remain under government management and control. The CFLUP includes specific land use information about the INTEC facility and is updated, as needed. The CFLUP will support this ICP by providing a tracking mechanism of land uses at WAG 3, OU 3-13.

The preferred future land uses were identified through a stakeholder process that included a public participation forum, a public comment period, and the Citizen's Advisory Board. The public participation forum was established to discuss and review development of the long-term land use scenarios and to identify regional planning issues that could affect the scenarios. The forum membership included members from local counties and cities, the Shoshone-Bannock Tribes, the BLM, the DOE, the U.S. Forest Service, the U.S. Park Service, the Idaho Department of Transportation, the Idaho Department of Fish and Game, and eight business, education, and citizens' organizations. The EPA and the IDHW participated in an ex officio capacity. The report was subject to a 30-day public comment period.

New projects and/or major land use changes at the INEEL will be coordinated with affected neighboring federal land management agencies, state resource management agencies, tribal agencies, private land owners, and the public.

The Long-term Land Use Team used the planning assumptions and the constraints to project the likely INEEL configuration in 25, 50, 75, and 100 years. Over time, the planning assumptions and resulting long-term scenarios may need to be revised due to unforeseen developments. Accordingly, the constraints, assumptions, and scenarios will be revised as necessary during updates of the CFLUP. Section 4 provides the methodology by which the CFLUP will be modified.

A directive from the White House is requiring all federal agencies (including DOE and the INEEL) not to release any information about contaminated sites to the public. This directive is in response to the September 11, 2001, terrorist attacks. DOE is in the process of deciding how to classify the CERCLA sites in the CFLUP.

The land use planning assumptions listed below are from the CFLUP (DOE-ID 1996):

1. As contaminated facilities become obsolete, decontamination and decommissioning will be required. Similarly, contaminated areas will require remediation. The decontamination and decommissioning process will commence following closure of a facility once it has been determined that the facility is no longer needed and sufficient funds are appropriated to safely accomplish the work.
2. To the extent practical, new development will be encouraged in developed facility areas to take advantage of existing infrastructures. Such redevelopment will reduce environmental degradation associated with construction activities in previously undeveloped areas.
3. The Central Facilities Area will remain the focal area for support and infrastructure activities, assuming continuity of existing or similar INEEL missions.
4. Environmental restoration and waste management activities will continue until complete.
5. Research and development facilities will be expanded to accommodate "new frontier research." To support such efforts, cooperative partnerships between the public and private sectors may be

developed to achieve mutual goals. This could result in the reuse of INEEL facilities by private sector interests, supplemented with technology support by INEEL personnel.

6. INEEL may be called upon to support defense-related operations.
7. Regional development trends will be closely related to activities at the INEEL. The weight of INEEL's influence on the region may increase or decrease over time depending on the diversity and strength of the regional economy.
8. No residential development (i.e., housing) will occur within INEEL boundaries. Grazing will be allowed to continue in the buffer area.
9. No new major, private developments (residential or nonresidential) on public lands are expected in areas adjacent to the site. There is uncertainty about the applicability of this assumption to privately held land. Beyond 25 to 50 years there is less certainty about this assumption.
10. A 2,305 km² (890 mi²) site dedicated to nuclear research, development, testing, evaluation, and environmental management is irreplaceable. It was therefore assumed that it is unlikely that the siting of a similar DOE facility and land withdrawal would occur in the future at any other location in the contiguous 48 states.
11. New locations for low-level waste disposal may need to be sited. If new locations are needed, they will be subject to regulatory approval processes.
12. In accordance with DOE Order 1230.2, DOE recognizes that a trust relationship exists between federally recognized Tribes and the DOE. The DOE will consult with tribal governments to assure that tribal rights and concerns are considered prior to DOE taking actions, making decisions, or implementing programs that may affect the Tribes. Consistent with the intent of Planning Assumptions 1 and 10 listed above, INEEL land use plans are formulated under the premise that the INEEL site, as it currently exists, should remain intact for the foreseeable future.

The abstract of the Long-term Land Use Future Scenarios for the INEEL supports this supposition by stating, "These scenarios project no change to the present INEEL boundaries within the 100-year period...."

2.4 WAG 3, Operable Unit 3-13 Release Site Locations

Release site locations within the seven major groups are shown in Figures 2-2 through 2-8. Location maps for the waste sites that have changed since the last update to the plans are included in Appendix A. These sites are CPP 37B, CPP-37C, CPP-48, and CPP-58. The remainder of the waste site location maps have been included in earlier versions of this IC plan and are not included in this update. With the exceptions of CPP-88 and CPP-95, the NFA sites are shown in Figure 2-9. Site CPP-88 (see Figure 2-10) consists of radionuclide-contaminated soils within the INTEC security fence that have not been attributed to another specific release site. Site CPP-95 (see Figure 2-10) is the wind-blown plume and consists of areas outside the current INTEC fence that are potentially contaminated as a result of wind dispersion of radionuclides from facility operations.

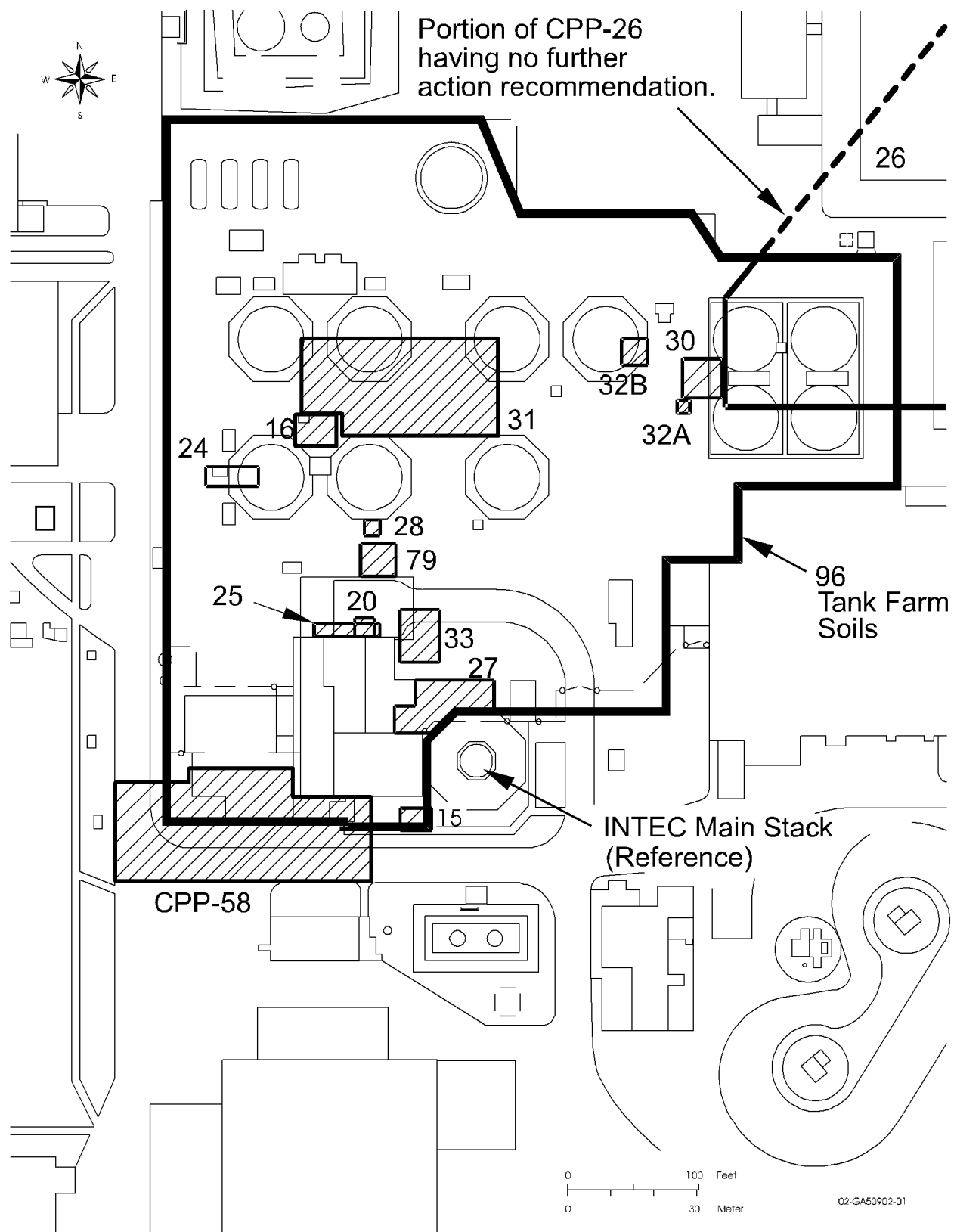


Figure 2-2. Group 1, Tank Farm Interim Action, site locations.

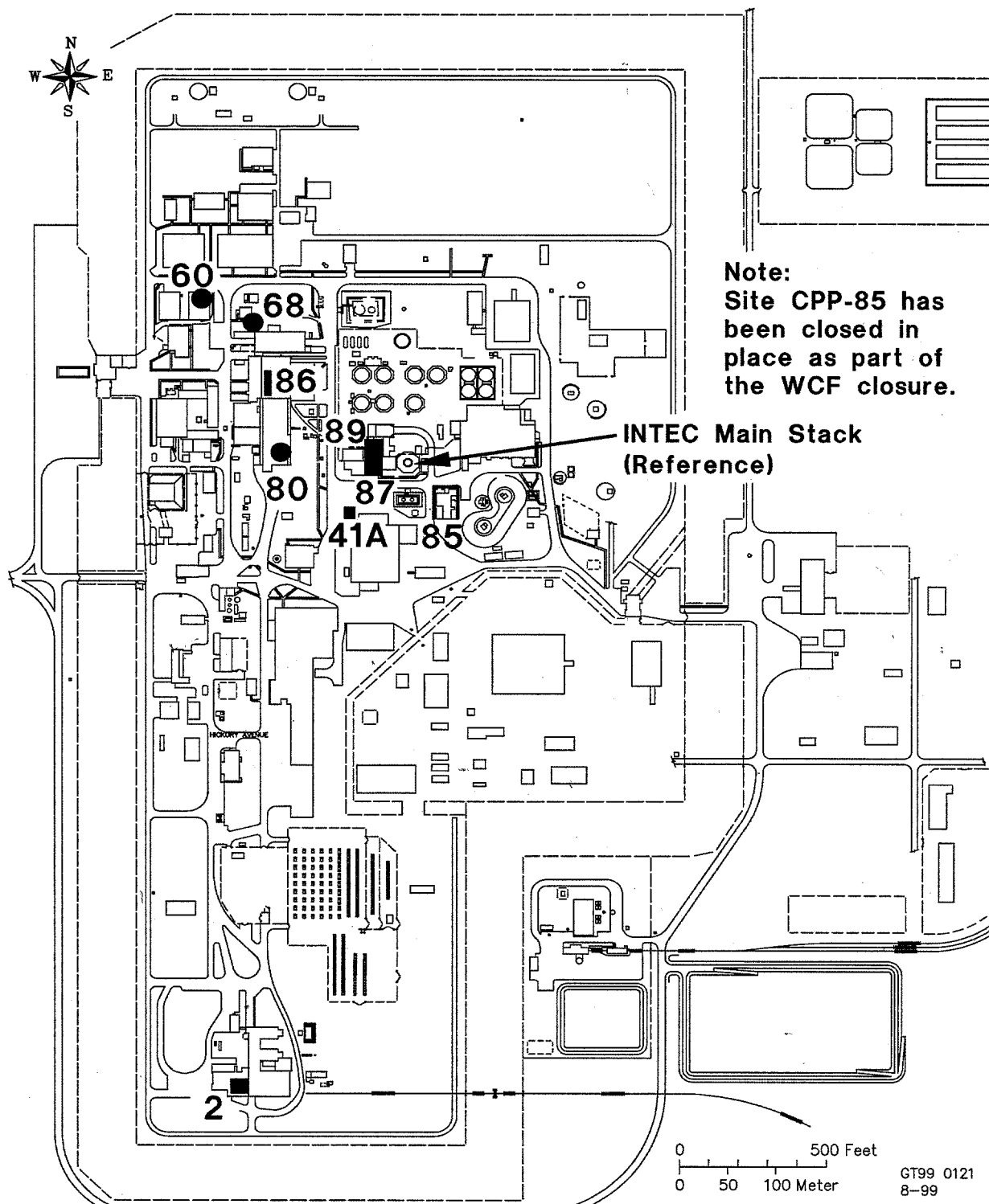


Figure 2-3. Group 2, Soils Under Buildings and Structures, site locations.

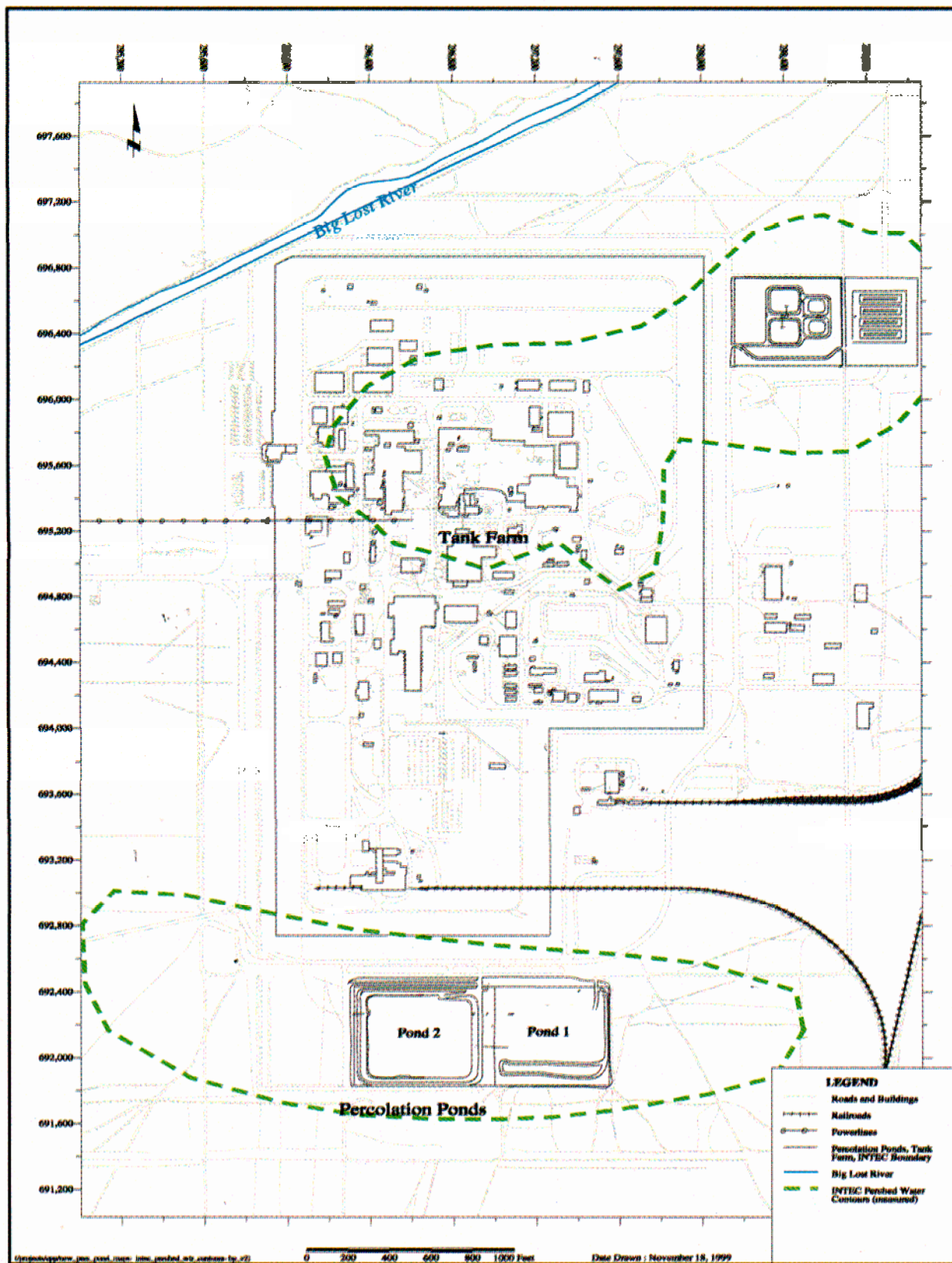


Figure 2-5. Group 4, Perched Water, sites.

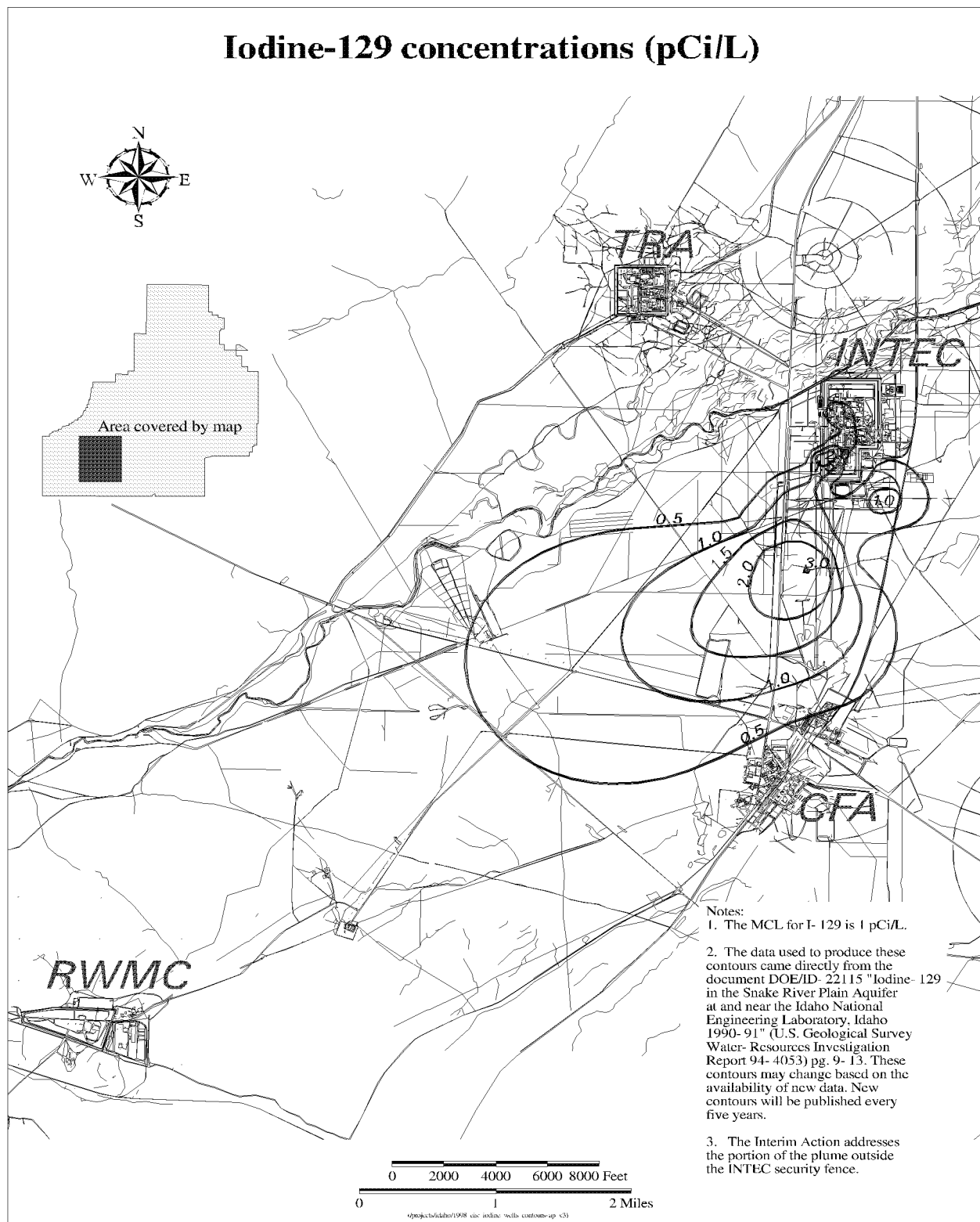


Figure 2-6. Group 5, Snake River Plain Aquifer, site.

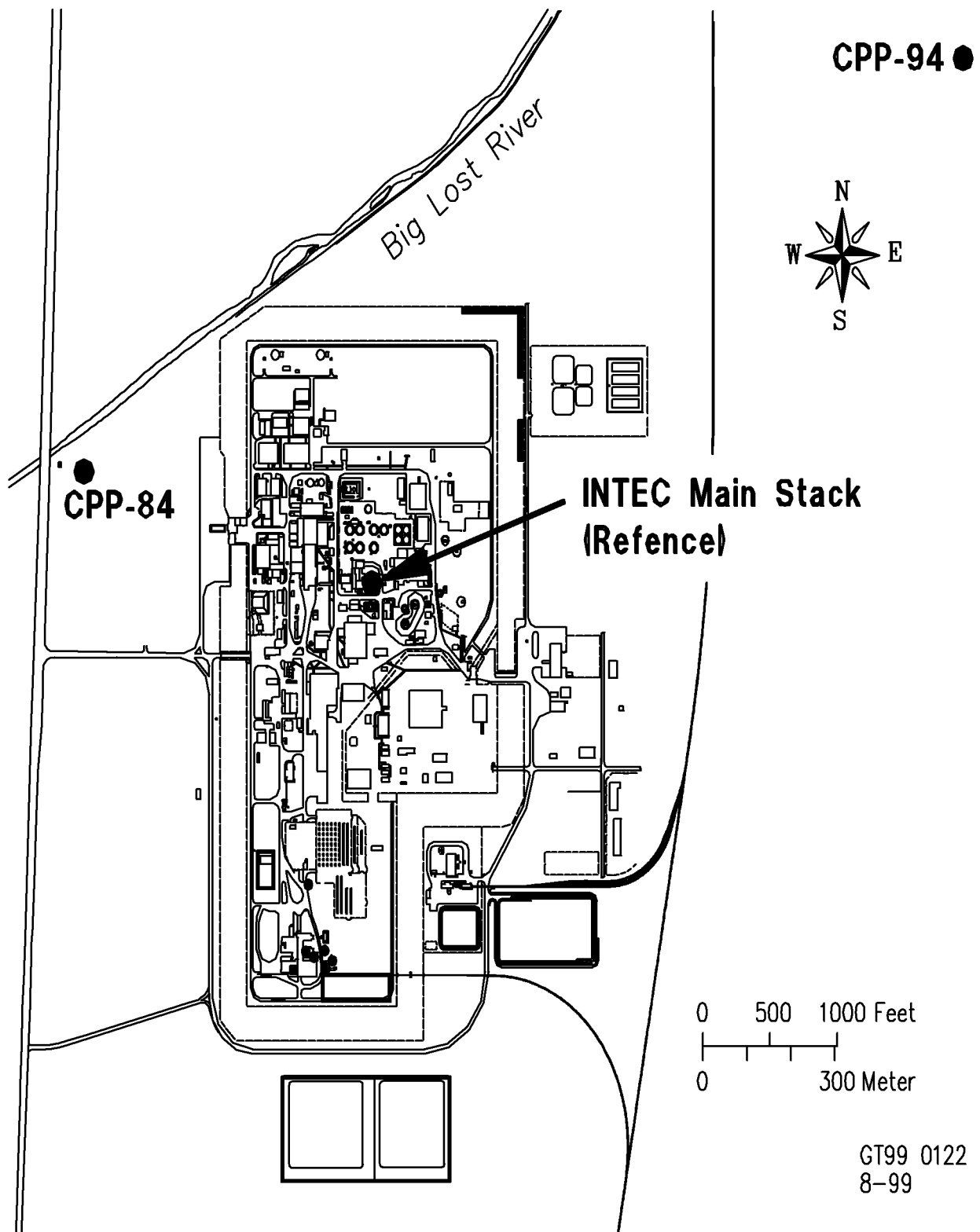


Figure 2-7. Group 6, Buried Gas Cylinder, site locations.

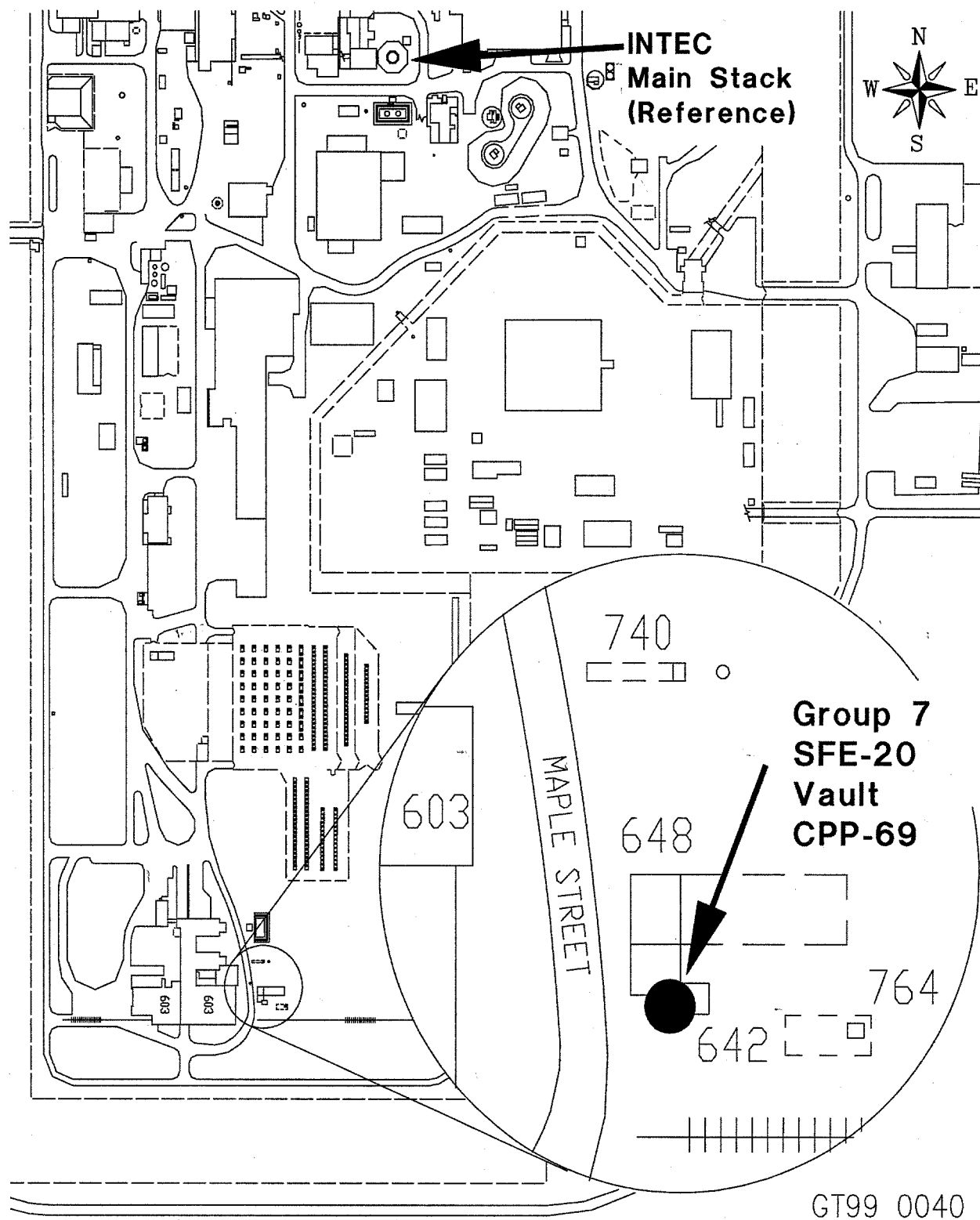


Figure 2-8. Group 7, SFE-20 Hot Waste Tank System, location.

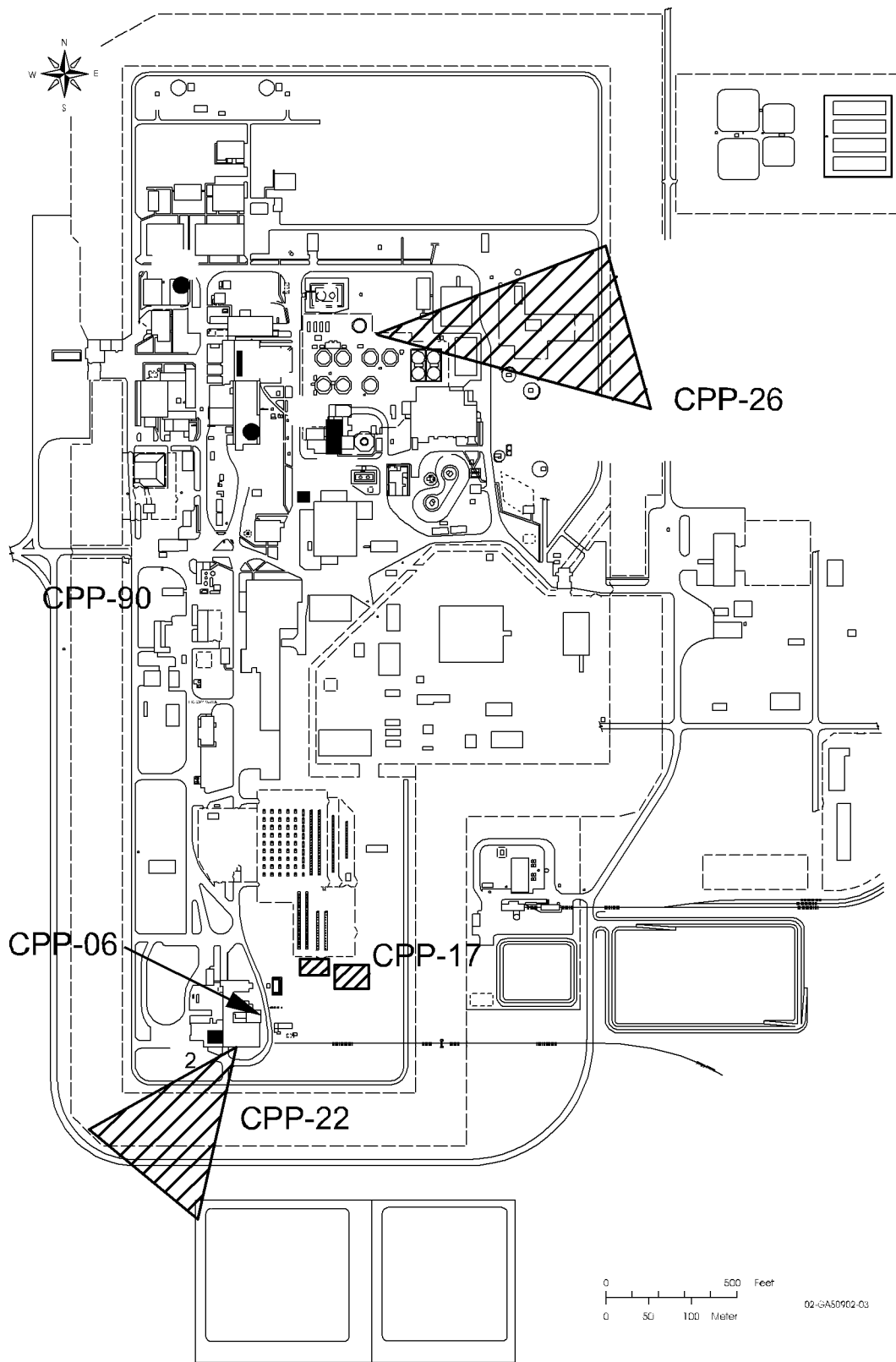


Figure 2-9. No Further Action sites.

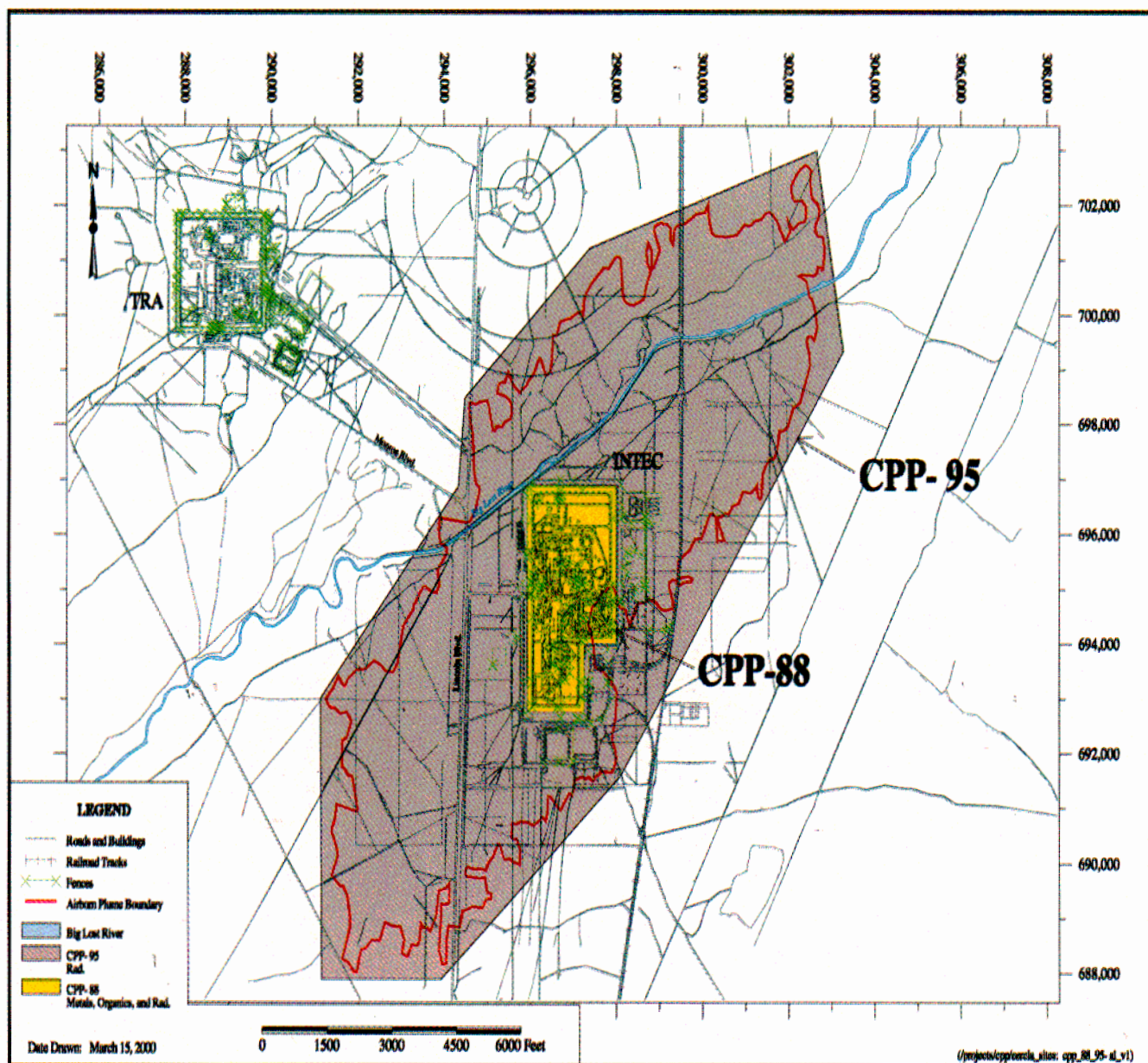


Figure 2-10. No Further Action sites CPP-88 and CPP-95.

3. INSTITUTIONAL CONTROLS

General descriptions of the ICs to be used within WAG 3, OU 3-13 are covered in this section. The applicable ICs and land use scenarios for each major WAG 3 site group are presented in Table 3-1. The table was reproduced from the WAG 3, OU 3-13 ROD.

3.1 Visible Access Restrictions

Visible access restrictions are those ICs that restrict personnel access to a specific release site. In the case of WAG 3, OU 3-13, these restrictions will be perimeter fencing, barriers, or permanent markers and warning signs. Warning signs or a combination of signs and boundary identifiers are sufficient to warn individuals that they are approaching an area controlled for CERCLA site hazard(s) protection. Warning signs will clearly identify the concerns at the release site and will be visible from normal avenues of approach, except where permanent structures restrict access normal avenues of approach. In such cases, signs will only be placed on the most used avenue of approach, i.e., Site CPP-41A.

3.2 Control of Activities

Control of activities includes those ICs that deal with the administrative controls relating to a release site. These ICs will cover all entities and people including, but not limited to, employees, contractors, lessees, and visitors that access a controlled release site. Although it is unlikely that routine trespassing would occur during DOE operations, trespassers will be included. The ICs will cover all activities and reasonably anticipated future activities including, but not limited to, any future soil disturbance, routine and nonroutine utility work, well placement and drilling, recreational activities, groundwater extraction, paving, training activities, construction, and renovation work on structures or other activities that might occur at a release site. These controls include, but are not limited to, the following items:

- INEEL Comprehensive Facilities and Land Use Plan
- Public notices
- Department of Energy Idaho Operations Office (DOE-ID) directives
- National Environmental Policy Act (NEPA) requirements
- Radiological work permits and/or general work orders
- Personnel training
- Soil disturbance notification process.

Table 3-1. Institutional controls for major WAG 3, OU 3-13, release site groups (DOE-ID 1999).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Threat					
1—Tank Farm Soils Interim Action	Current DOE operations until final action is implemented	Industrial—radiologically controlled area	Radionuclides and metals Moderate exposure threat		Prevent intrusion into underlying contaminated soils, except for approved activities pursuant to the FFA/CO. Limit access to only authorized personnel and/or DOE-certified radiation workers.	Visible access restrictions (warning signs, copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in the INEEL CFLUP.	FFA/CO; 10 CFR 835, “Occupational Radiation Protection”; DOE Order 5400.5, “Radiation Protection of the Public”; as-low-as-reasonably-achievable (ALARA) 40 CFR 300.	Annual inspections by DOE and IDHW/EPA reviews. Frequency may be modified in the Remedial Action Work Plan. <i>Note: The Interim Action is expected to last for less than 10 years and be replaced by the final action, OU 3-14.</i>
2a—Soils Under Buildings and Structures (cap-in-place) ^a	Current DOE operations prior to deactivation, decontamination, and decommissioning (D&D&D) of building	Industrial—radiologically controlled area	Radionuclides and metal Low exposure threat		Limit access to only authorized personnel and/or DOE-certified radiation workers.	Visible access restrictions (warning signs, provide copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in the INEEL CFLUP.	FFA/CO; 10 CFR 835, “Occupational Radiation Protection”; DOE Order 5400.5, “Radiation Protection of the Public”; ALARA; 40 CFR 300.	Require state/EPA notice prior to start of building D&D&D. Annual inspections by DOE and IDHW/EPA reviews. Frequency may be modified in the Remedial Action Work Plan. <i>Note: Building demolition will be performed outside scope of ROD.</i>

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat	Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
	Current DOE operations after building D&D&D-contamination left in place	Industrial landfill—no unauthorized intrusion into capped area; FFA/CO-approved operations and maintenance (O&M) activities authorized	Radionuclides and metals Low exposure threat	Limit direct exposure to underlying radiologically contaminated soil areas by public to <1E-4 risk through shielding provided by building and cap. Limit water recharge activities adjacent to Group 2 buildings. Maintain integrity of cap.	Visible access restrictions (warning signs, provide copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in the INEEL CFLUP. Notice to affected stakeholders (e.g., BLM, Fish and Wildlife Service (F&W), ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities.	FFA/CO; 10 CFR 835, “Occupational Radiation Protection”; DOE Order 5400.5, “Radiation Protection of the Public”; ALARA; 40 CFR 300; CERCLA 120(h)	Annual inspections and reviews. Frequency may be modified in the Remedial Action Work Plan.
	DOE control post-operations	Landfill—no unauthorized intrusion into capped area; FFA/CO-approved O&M activities authorized		Maintain integrity of cap.	Visible access restrictions (warning signs). Control of activities (drilling or excavating). Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities. Property lease requirements, including requirements for control of land use consistent with the ROD.	FFA/CO, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act, ^c DOE Order 5400.5 (see section on Property Release Restrictions)	Annual cap inspection and IC reviews until determined to not be needed.

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
2b—Soils Under Buildings and Structures (remaining after removal to and disposal in ICDF)	Post-DOE control	Landfill—no unauthorized intrusion into capped area; FFA/CO-approved O&M activities authorized			Maintain integrity of cap.	Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities. Property transfer requirements, including finding of suitability to transfer and requirements for control of land use consistent with the ROD.	FFA/CO, CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7, ^k DOE Order 5400.5 (see section on Property Release Restrictions)	Annual cap inspection and IC reviews until determined to not be needed.
	Current DOE operations	Industrial	Contaminants removed to 10 ft		Ensure land use is appropriate if contamination is left in place >10 ft.	Review and control of activities as applicable.	OU 3-13 ROD, FFA/CO, 10 CFR 1021 NEPA Review of Activities	Annual reviews until determined to not be needed. Includes review of land-use assumptions (OSWER Directive 9355.7-02A) (Supplemental Five-year Review Guidance) (EPA 2001).
	DOE control post-operations	Industrial	Contaminants removed to 10 ft		Ensure land use is appropriate if contamination is left in place >10 ft.	Property lease requirements including requirements for control of land use consistent with the ROD.	OU 3-13 ROD, FFA/CO, 10 CFR 1021 NEPA Review of Activities, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act ^c , DOE Order 5400.5 (see section on Property Release Restrictions)	Annual reviews until determined to not be needed. Includes review of land-use assumptions.

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Contaminants removed to 10 ft	Threat				
3a—ICDF	Post-DOE control	Industrial to 2095, residential after 2095	Contaminants removed to 10 ft		Ensure land use is appropriate if contamination left in place >10 ft.	Property transfer requirements, including finding of suitability to transfer and requirements for control of land use consistent with the ROD.	OU 3-13 ROD, FFA/CO, CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7, ^k DOE Order 5400.5 (see section on Property Release Restrictions)	Annual reviews until determined to not be needed. Includes review of land-use assumptions.
	Current DOE operations	Industrial—radiologically controlled area	Radionuclides and metal Low exposure threat		Limit access to only authorized personnel and/or DOE-certified radiation workers.	Visible access restrictions (warning signs, provide copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in the INEEL CFLUP.	FFA/CO; 10 CFR 835, “Occupational Radiation Protection”; DOE Order 5400.5, “Radiation Protection of the Public”; ALARA; 40 CFR 300	Require state/EPA notice prior to start of building D&D&D. Annual inspections by DOE and IDHW/EPA reviews. Frequency may be modified in the Remedial Action Work Plan.

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Threat	Exposure				
Current DOE operations after ICDF waste placement and cap completion		Industrial landfill—no unauthorized intrusion into capped area; FFA/CO-approved O&M activities authorized	Radionuclides and metals Low exposure threat		Limit direct exposure to underlying radiologically contaminated soil areas by public to <1E-4 risk through shielding provided by building. Maintain integrity of cap.	Visible access restrictions (warning signs, provide copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in the INEEL CFLUP. Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities.	FFA/CO; 10 CFR 835, “Occupational Radiation Protection”; DOE Order 5400.5, “Radiation Protection of the Public”; ALARA; 40 CFR 300; CERCLA 120(h)	Annual inspections and reviews. Frequency may be modified in the Remedial Action Work Plan.
DOE control post-operations		Landfill—no unauthorized intrusion into capped area; FFA/CO-approved O&M activities authorized			Maintain integrity of cap.	Visible access restrictions (warning signs). Control of activities (drilling or excavating) Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities. Property lease requirements including requirements for control of land use consistent with the ROD.	FFA/CO, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act, ^c DOE Order 5400.5 (see section on Property Release Restrictions)	Annual cap inspection and IC reviews until determined to not be needed.

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs)		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Threat	Exposure				
3b—Other Soil Sites (contaminants remaining at depth > 10 ft after removal to and disposal in ICDF)	Post-DOE control	Landfill—no unauthorized intrusion into capped area; FFA/CO-approved O&M activities authorized			Maintain integrity of cap.	Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities. Property transfer requirements, including finding of suitability to transfer and requirements for control of land use consistent with the ROD.	FFA/CO, CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7, ^k DOE Order 5400.5 (see section on Property Release Restrictions)	Annual cap inspection and IC reviews until determined to not be needed.
	Current DOE operations	Industrial	Contaminants removed to 10 ft		Ensure land use is appropriate if contamination left in place > 10 ft.	Review and control of activities as applicable.	OU 3-13 ROD, FFA/CO, 10 CFR 1021 NEPA Review of Activities	Annual reviews until determined to not be needed. Includes review of land-use assumptions (OSWER Directive 9355.7-02A) (Supplemental Five-year Review Guidance) (EPA 2001).
	DOE control post-operations	Industrial	Contaminants removed to 10 ft		Ensure land use is appropriate if contamination left in place > 10 ft.	Property lease requirements including requirements for control of land use consistent with the ROD.	OU 3-13 ROD, FFA/CO, 10 CFR 1021 NEPA Review of Activities, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act, ^c DOE Order 5400.5 (see section on Property Release Restrictions)	Annual reviews until determined to not be needed. Includes review of land-use assumptions.

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Threat					
4—Perched Water	Post-DOE control	Industrial to 2095, residential after 2095	Contaminants removed to 10 ft	Ensure land use is appropriate if contamination left in place >10 ft.	Property transfer requirements, including finding of suitability to transfer and requirements for control of land use consistent with the ROD.	OU 3-13 ROD, FFA/CO, CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7, ^k DOE Order 5400.5 (see section on Property Release Restrictions)	Annual reviews until determined to not be needed. Includes review of land-use assumptions.	
	Current DOE operations	Industrial	Prevent consumption and use of >maximum contaminant level (MCL) and/or >1E-04 risk drinking water.	Control of activities (drilling wells for drinking).	DOE-ID directive limiting access to prevent groundwater use while INTEC operations continue and to restrict future groundwater use (through noticing this restriction to local county governments, ShoBan Tribal council, General Services Administration [GSA], BLM, etc.), including site access restrictions, and drilling restrictions	Annual reviews until determined to not be needed.		

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
	DOE control post-operations	Industrial			Prevent consumption and use of >MCL and/or >1E-04 risk drinking water.	Control of activities (drilling wells for drinking). Property lease requirements, including finding of suitability to transfer and requirements for control of activities.	OU 3-13 ROD, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act ^c DOE-ID directive limiting access to prevent groundwater use while INTEC operations continue and to restrict future groundwater use (through noticing this restriction to local county governments, Shoshone Tribal council, GSA, BLM, etc.), including site access restrictions, and drilling restrictions	Annual reviews until determined to not be needed.

Table 3-1. (continued).

Group or Source Area	Contaminants of Concern (COCs)			Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
	Time Frame	Land Restriction	Threat and Exposure				
5—Snake River Plain Aquifer - outside INTEC 1999 fence line	Post-DOE control (>2095)	Residential	Prevent drilling through contaminated interbeds and dragging contamination downhole to the SRPA.	Property transfer requirements, including finding of suitability to transfer and requirements for control of activities consistent with ROD.	FFA/CO, CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7 ^k DOE-ID directive limiting access to prevent groundwater use while INTEC operations continue and to restrict future groundwater use (through noticing this restriction to local county governments, Shoshone Tribal council, GSA, BLM, etc.), including site access restrictions and drilling restrictions	Annual reviews until determined to not be needed. Includes review of land-use assumptions.	
	Current DOE Operations	Industrial	Prevent consumption and use of >MCL and/or >1E-04 risk drinking water.	Control of activities (drilling wells for drinking).	FFA/CO	Annual reviews until determined to not be needed.	

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Threat					
	DOE control post-operations - applies up to 2095	Industrial			Prevent consumption and use of >MCL and/or > 1E-04 risk drinking water.	Control of activities (drilling wells for drinking). Property lease requirements including finding of suitability to transfer.	OU 3-13 ROD, FFA/CO, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act ^c NEPA environmental checklist use limiting access to prevent groundwater use while INTEC operations continue and to restrict future groundwater use (through noticing this restriction to local county governments, ShoBan Tribal council, GSA, BLM, etc.), including site access restrictions, and drilling restrictions	Annual reviews until determined to not be needed.

Table 3-1. (continued).

Group or Source Area	Contaminants of Concern (COCs)			Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
	Time Frame	Land Restriction	Threat				
6a—Buried Cylinders ¹ (removal)	Post-DOE control - applies up to 2095	Industrial (residential after 2095)		Prevent consumption and use of >MCL and/or >1E-04 risk drinking water (not applicable after 100 years).	Property transfer requirements, including finding of suitability to transfer (not applicable after 100 years).	OU 3-13 ROD, FFA/CO, CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7 ^k	Annual reviews until determined to not be needed.
	Current DOE operations	Industrial	Chemical and explosive	Prevent access to sites except by authorized workers.	Visible access restrictions (warning signs, provide copies of surveyed maps).	NEPA environmental checklist use limiting access to prevent groundwater use while INTEC operations continue and to restrict future groundwater use (through noticing this restriction to local county governments, ShoBan Tribal council, GSA, BLM, etc.), including site access restrictions and drilling restrictions	Periodic inspection until remediation is complete.
	Post-remediation	Unrestricted		Not applicable - to be remediated.		FFA/CO, 10 CFR 835, "Occupational Radiation Protection"	

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Chemical and explosive	Threat				
6b—Buried Cylinders ¹ (cap-in-place)	Current DOE operations prior to cap construction	Industrial	Chemical and explosive		Limit access to only authorized personnel.	Visible access restrictions (warning signs, copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in INEEL Land Use Plan.	FFA/CO, 10 CFR 835, “Occupational Radiation Protection”	Require state/EPA notice prior to start of cap construction. Annual inspections by DOE and IDHW/EPA reviews. Frequency may be modified in the Remedial Action Work Plan.
	Current DOE operations after cap construction—cylinders left in place	Industrial landfill—no unauthorized intrusion into capped area, FFA/CO-approved O&M activities authorized	Chemical and explosive		Maintain integrity of cap.	Visible access restrictions (warning signs, copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in INEEL Land Use Plan. Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities.	FFA/CO, 10 CFR 835, “Occupational Radiation Protection”	Annual cap inspection and IC reviews. Frequency may be modified in the Remedial Action Work Plan.

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
			Chemical and explosive	Threat				
DOE control post-operations		Landfill—no unauthorized intrusion into capped area; FFA/CO-approved O&M activities authorized			Maintain integrity of cap.	Visible access restrictions (warning signs). Control of activities (drilling or excavating). Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land use designation, restriction, land users, or activities. Property lease requirements, including requirements for control of land use consistent with the ROD.	FFA/CO, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act, ^c DOE Order 5400.5 (see section on Property Release Restrictions)	Five-year review until determined to not be needed.
Post-DOE control		Landfill—no unauthorized intrusion into capped area; FFA/CO-approved O&M activities authorized			Maintain integrity of cap.	Notice to affected stakeholders (e.g., BLM, F&W, ShoBan Tribal Council, local county governments, state, and EPA), including notice of any change in land-use designation, restriction, land users, or activities. Property transfer requirements, including finding of suitability to transfer and requirements for control of land use consistent with the ROD.	FFA/CO, CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7, ^k DOE Order 5400.5 (see section on Property Release Restrictions)	Annual reviews until determined to not be needed.

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat		Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
7—Hot Waste Tank System prior to excavation ¹	Current DOE operations	Industrial		Prevent intrusion into underlying tank system, except for approved activities pursuant to the FFA/CO. Limit access to only authorized personnel and/or DOE-certified radiation workers.	Visible access restrictions (warning signs, copies of surveyed maps). Control of activities (drilling or excavating). Publish surveyed boundaries and description of controls in the INEEL CFLUP.	FFA/CO; 10 CFR 835, “Occupational Radiation Protection”; DOE Order 5400.5, “Radiation Protection of the Public”; ALARA; 40 CFR 300	Annual inspections by DOE and IDHW/EPA reviews. Frequency may be modified in the Remedial Action Work Plan.	
No Further Action (NFA) sites	DOE control post-operations	Industrial radiologically controlled		Control land use as protective and consistent with NFA determination.	Property lease requirements, including requirements for control of land use consistent with the ROD.	FFA/CO, CERCLA Section 120(h)(5), ^b Hall Amendment Section 3154 of the National Defense Authorization Act, ^c DOE Order 5400.5 (see section on Property Release Restrictions)	Annual reviews until determined to not be needed.	
Post-DOE control	Industrial to 2095, residential following 2095			Control land use as protective and consistent with NFA determination.	Property transfer requirements, including finding of suitability to transfer and requirements for control of land use consistent with the ROD.	FFA/CO CERCLA Section 120(h)(3), ^d CERCLA Section 120(h)(3)(C)(ii), ^e CERCLA Section 120(h)(3)(A)(iii), ^f CERCLA Section 120(h)(1)-(3), ^g CERCLA Section 120(h)(4), ^h 43 CFR 2372.1, ⁱ 43 CFR 2374.2, ^j 41 CFR 101-47.202-1,-2,-7, ^k DOE Order 5400.5 (see section on Property Release Restrictions)	Annual reviews until determined to not be needed.	

Table 3-1. (continued).

Group or Source Area	Time Frame	Land Restriction	Contaminants of Concern (COCs) and Exposure Threat	Objective	Controls	Regulatory Basis/Authority	Surveillance Frequency
<p>a. Group 2 includes the Old Waste Calciner Facility, which was recently grouted in place.</p> <p>b. Notification to state of leases involving contamination.</p> <p>c. Request concurrence of EPA on leases of NPL sites.</p> <p>d. Statement in deed that remedial action is complete.</p> <p>e. If remedial action is not complete, restrictions, response, guarantee, and schedule, budget assurances to be included in deed.</p> <p>f. Clause allowing U.S. access to property to be included in deed.</p> <p>g. Notice of information on hazardous substance to be included in deed.</p> <p>h. Identify uncontaminated parcels of land.</p> <p>i. Notice of intent to relinquish to the Department of the Interior (DOI) with contamination information and protection needs.</p> <p>j. Transfer to DOI should indicate continuation of DOE responsibility.</p> <p>k. Report on contamination information and allowed land use.</p> <p>l. Use is unrestricted after remediation activities, and institutional controls do not apply.</p>							

Note: The ICP will be modified as new information regarding sites becomes available and as requirements related to ICs are specified in other post-ROD documents such as operations and maintenance plans.

3.3 Unauthorized Access

Unauthorized access refers to those ICs that prevent the unauthorized entry of personnel and vehicles onto a release site. Unauthorized access to the INEEL is controlled under the authority given in 10 CFR 860, “Trespassing on Department of Energy Property.” At both the INEEL and the INTEC facilities, identification badges are required. Any member of the general public that visits the INEEL or INTEC must pass through visitor control and be escorted by authorized personnel.

Sites that pose a radiological exposure risk to personnel or visitors are physically and administratively controlled so only radiologically trained workers can access the sites, as designated under 10 CFR 835, “Occupational Radiation Protection.” Worker exposure also is maintained as low as reasonably achievable (ALARA).

3.4 INEEL Comprehensive Facilities and Land Use Plan

The INEEL CFLUP specifies ICs that deal with land use. Maps will be available for all workers to locate the affected areas, and the access control procedures will refer to these maps. The CFLUP will be used as a tracking mechanism for changes to land use and land use controls by controlling and documenting revisions to these maps. The CFLUP will be updated on an annual basis, if necessary, to reflect changes in land uses and ICs that deal with land use. At the present time, the specifics associated with the WAG 3 CERCLA sites provided in the CFLUP are not available for unrestricted use. This is because of limitations placed on the release of this information by government classifiers based on homeland security issues.

3.5 Notice To Affected Stakeholders

Release sites with remaining contaminants require notification be made to affected stakeholders prior to any change in land-use designation, land-use restriction, or land user and at routine intervals not to exceed 60 months. Public notice procedures and a complete listing of stakeholders are given in Section 4.2.2. Routine notifications for each will be continued until ICs for that site are terminated. Specifics on EPA’s notifications of land-use change are discussed in Section 4.5. The specific stakeholders include, but are not limited to, the following:

- Bureau of Land Management
- ShoBan Tribal Council
- U.S. Fish and Wildlife Service
- Local county governments
- State of Idaho
- Environmental Protection Agency.

4. METHODOLOGIES AND PROCEDURES

This section provides the methodologies and overall procedures for implementing, maintaining, and inspecting ICs for WAG 3, OU 3-13. Certain internal company procedures are in place that detail access procedures, general and radiological work procedures, and training requirements. EPA guidance dictates that it is not the intent to add substantial administrative burden to federal facilities that have existing procedures, policies, orders, instructions or plans in developing an ICP (EPA 1999). Therefore, only outlines of certain existing procedures related to ICs are provided in this section.

4.1 Visible Access Restrictions

Warning signs required for ICs shall be clearly posted. Appropriate signs will be placed intermittently along the boundary of a release site. The effect upon visibility from opening doors or other changes in configuration will be considered when posting warning signs. At least one sign will be placed on each side of an area's boundary, and the sign(s) will be visible from any normal avenue of approach. A distance of no greater than 61 m (200 ft) between signs intermittently along the area's boundary will be considered standard for release sites. At release sites where boundaries are not easily distinguishable, a warning sign will be located at the most readily accessible and centrally located portion of the site.

For Group 2 release sites, warning signs will be posted at all pedestrian access doors, with the exception of release site CPP-80. At release site CPP-80, the only access is a stairwell, which will be posted. Additionally for Group 2, if the site boundary of a Group 2 site extends beyond the exterior of a building wall, a sign will be posted at that exterior wall.

The background for the entire CERCLA site warning sign or label will be orange. The lettering will be black and proportional to the size of the sign or label. The color scheme used for CERCLA site postings and labels will be consistent throughout INTEC and will be reserved for CERCLA site hazard communication only. Signs and labels will be built to endure expected environmental conditions without significant deterioration of color, legibility, strength, or other physical characteristics. The signs will be at least 22 cm × 28 cm (8.5 in. × 11 in.).

Warning signs will indicate the release site hazard and exposure threat. Site hazards will be designated with the general contaminants of concern (COCs), such as radionuclides, metals, and/or organics. The exposure threat portion of the sign will indicate the primary type of exposure likely to occur such as external radiation, dermal contact, or ingestion hazard. A release site map will be included with the warning signs, again on orange background, and will be at least 22 cm × 28 cm (8.5 in. × 11 in.).

Boundary identifiers, if necessary, will consist of fences, ropes, chains, color-coded adhesive tape, permanent surveyed markers, or other material sufficient to delineate the boundary of the area. Boundary identifiers and physical barriers will be clearly visible from all normal access directions and various elevations to prevent inadvertent access to areas. For example, rope barriers will be approximately 60 to 100 cm (24 to 40 in.) in height. Existing physical barriers, such as fences or walls, will be used as boundary identifiers if the posting is adequate to prevent inadvertent access to the area. Some sites, such as the Tank Farm Area, Group 1, have an existing physical marker, such as a chain link fence or a building, that delineates the release site where physical barriers exist. No additional boundary markers will be placed at the specific corner(s) of the individual release sites where these features are in place. Instead, the fence or building and the warning signs will be used as visible access restrictions.

The WAG 3 environmental site operations manager will be responsible for the posting of CERCLA release sites with signs and boundary identifiers requiring ICs. Warning signs will be securely affixed and located such that signs and labels can be expected to remain in place when subjected to expected adverse

conditions and environments. An example of a warning sign that will be posted at the release sites requiring ICs is given in Figure 4-1.

4.2 Control of Activities

4.2.1 INEEL Comprehensive Facilities and Land Use Plan

The INEEL CFLUP will be modified on an annual basis, if necessary, or as land uses change, and will complement this ICP in tracking land use changes. The Land and Facilities Operations Department of INEEL is responsible for coordinating with the WAG 3, OU 3-13 project manager as new information becomes available in consideration of the release sites and as IC inspections occur. The Land and Facilities Operations Department will update the CFLUP to include new information as IC inspections are performed. The CFLUP is currently unavailable to the public because of security concerns associated with new guidance from the DOE-HQ associated with homeland security. When the information in the CFLUP is made available to the public it will be posted on the INEEL web site at www.inel.gov.

4.2.2 Public Notices

Stakeholders are individuals, groups, and organizations who will be affected by cleanup activities at the INEEL by transferring or leasing of property, who believe they will be affected by the project(s) or property conveyance, or who want to be involved for any reason. Table 4-1 shows the primary stakeholders, which provide a wide spectrum in regard to age, background, education, profession, and level of interest. Secondary stakeholders include the much larger Idaho population and other distinct groups. A variety of effective communication methods will be used.

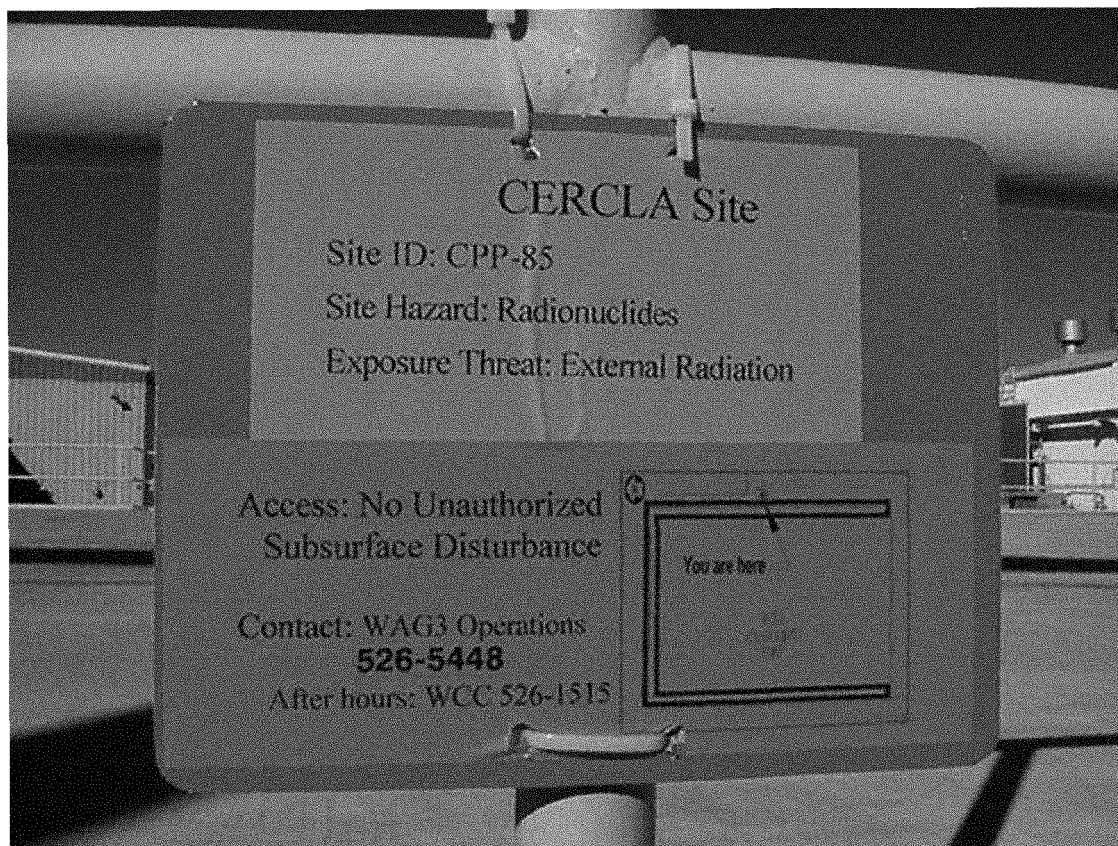


Figure 4-1. Example CERCLA site sign (typical).

Table 4-1. Primary stakeholders.

Federal Government	State Government	Counties	Tribes	Cities	News Media	Broadcast Media	Advertiser	Others
DOE-HQ	Idaho Governor's Office	Bannock	Shoshone-Bannock	Aberdeen	Arco Advertiser	KTVB - Boise	Daily News	Chambers of Commerce
DOE-ID	Idaho Attorney General	Bingham	Nez Perce	Arco	Statesman	KIVI - Nampa/Boise	DOE Progress	Civic Organizations
Idaho Congressional Delegation	Bureau of Disaster Services	Blaine		Atomic City	Times-News	KBCI - Boise	Inside Energy	Coalition 21
EPA	Idaho Legislature	Butte		Blackfoot	Idaho State Journal	KLEW - Lewiston	EM Progress	Environmental Defense Institute
Craters of the Moon National Monument	Emergency Response Commission	Clark		Buhl	Post Register	KMVT - Twin Falls	Weapons Complex Monitor	Greater Yellowstone Coalition
Department of the Interior	Department of Water Resources	Custer		Burley	Sho-Ban News	KIDK - Idaho Falls/Pocatello		Idaho Conservation League
Pittsburgh Naval Reactors	Department of Transportation	Fremont		Rupert		KRIC - Rexburg		Idaho Migrant Council
National Oceanic and Atmospheric Administration	Department of Commerce	Jefferson		Twin Falls		KTFI - Idaho Falls/Pocatello		INEEL Citizen Advisory Board
Argonne National Laboratory- West	Idaho Department of Health and Welfare- Division of Environmental Quality	Madison		Howe		KSEI - Pocatello		INEEL employees
Nuclear Regulatory Commission		Minidoka		Idaho Falls		KART - Jerome		League of Women Voters
				Ketchum		KBOI - Boise		Natural Resources Defense Council
				Sun Valley		KPVI - Idaho Falls/Pocatello		Snake River Alliance
				Mud Lake		KUOI - Moscow		Keep Yellowstone Nuclear Free
				Terreton		KIFI - Idaho Falls		Greenpeace
				Pocatello		KBSU - Boise		Sierra Club
								Construction contractors
								Potential bidders for INEEL M&O contract
								Regional Universities
								Technology partners

Of the stakeholders and stakeholder groups listed, the following are the most active in the INEEL activities: Shoshone-Bannock Tribes, INEEL employees, Coalition 21, Environmental Defense Institute, INEEL Citizens Advisory Board, Snake River Alliance, and the news media. Public communication and involvement will be geared primarily toward the groups who are most actively involved. However, Community Relations will always offer opportunities to all stakeholders. For land use changes and property leasing or transfer, INEEL Community Relations is responsible for contacting the stakeholders and providing news media with the appropriate information. At least 6 months prior to any INTEC property lease or property conveyance, stakeholders will be informed; however, stakeholders will be routinely informed at least every 5 years of land use status through written notices regardless of any potential land use changes.

4.2.3 DOE-ID Directives

Department of Energy directives include policies, orders, notices, manuals, and guides that are intended to direct, guide, inform, and instruct employees in the performance of their jobs, and enable them to work effectively within the Department and with regulatory agencies, contractors, and the public. Department of Energy directives are legally binding for DOE and all of its contractors through the Price Anderson Amendments Act of 1988, which is an amendment to the Atomic Energy Act (42 USC 2011). Future directives and guidance concerning restricting groundwater use and access are being considered for the INEEL as part of the evaluation of long-term stewardship. These may include well-drilling restrictions or easements for monitoring, restrictive covenants, or deed restrictions that would be deemed necessary to further protect the public and the environment in the event of land use or ownership changes.

The requirements of the internal work procedures apply to all water wells, monitoring wells, low-temperature geothermal wells, and other artificial excavations in the ground that are greater than 6 inches in vertical depth below the land surface. Well construction procedures must also adhere to the Idaho Department of Water Resources minimum construction standards and the substantive requirements of well permitting under Idaho Administrative Procedure Act 37.03.09.

The overall procedure for constructing potable supply wells at the INEEL in regards to preventing human exposure includes

- Locate wells a minimum of 50 ft from any potential source of contamination
- Ensure that pesticides, herbicides, fertilizers, petroleum products, and other toxic or hazardous substances are not stored within 50 ft of a well.

Drinking water from wells is routinely monitored at the INEEL; however, the program is not part of the IC program. Monitoring is included as part of the interim action for Group 5, which will be detailed in other post-ROD Group 5 documentation.

The WAG 3, OU 3-13 ROD also directs that the DOE notify the local county governments, ShoBan tribal council, and the General Services Administration (GSA) of groundwater use restrictions following cessation of INTEC operations.

4.2.3.1 National Environmental Policy Act Requirements. The DOE-ID, in accordance with DOE Order 451.1B [National Environmental Policy Act (NEPA) Compliance Program] requires that all federal actions perform a NEPA evaluation. At the INEEL, this would include activities such as modifications to wells or water systems. To assist in assessing the activity, proposed actions are required to have an environmental checklist (EC) prepared and signed off by DOE-ID. An example environmental checklist is included in Appendix B of this document. The environmental checklist process and NEPA

will ensure that no unauthorized drilling or access occurs at the INEEL. DOE Order 451.1B is the DOE order that implements the Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508) and the DOE NEPA Implementing Procedures (10 CFR Part 1021). This EC review and NEPA analysis sign-off ensures that the applicable environmental requirements associated with the project have been identified and that the project will be in compliance with the applicable requirements prior to operation. Additional protections for drilling in the WAG 3 area of contamination also include the required agency approvals for a Notice of Disturbance (NOD), in addition to the requirements for State of Idaho approval prior to constructing or modifying a drinking water system (IDAPA 58.01.08.551.06 and 37.03.09.25).

4.2.4 General Work Orders and Radiological Work Permits

4.2.4.1 General Work Orders. All work conducted at the INEEL is controlled through the Integrated Work Control Process detailed in STD-101. The Integrated Work Control Process is the method by which the Integrated Safety Management System, Enhanced Work Planning, and Voluntary Protection Program (VPP) are implemented. STD-101 details the initiation, development, and approval process of the work order needed to perform certain projects at the INEEL site. STD-101 applies to all INEEL employees and subcontractors performing or supporting maintenance or construction work, or both. In consideration of ICs at WAG 3 release sites, the work order identifies specific regulatory requirements for work activities, environmental management requirements, radiological control requirements, and safety and industrial hygiene requirements. The work order also specifies all training requirements for a specific project within a specific location at the INEEL. For details regarding the Integrated Work Control Process, refer to STD-101. An example of a work order is provided in Appendix C.

Work orders initiated for maintenance and construction activities specific to INTEC and the WAG 3, OU 3-13 ROD designated area of contamination must also include an NOD approval package. Through this mechanism, the WAG 3 environmental restoration site operations manager is informed of work being performed at INTEC and whether the work performed involves a soil disturbance at a release site. The NOD process is outlined in Section 4.2.6.

4.2.4.2 Radiological Work Permits. For the majority of the release sites associated with WAG 3, OU 3-13, radiological exposure has been identified as the primary exposure threat. Written authorizations are required to control entry into and perform work within radiological areas (10 CFR 835.501(d)). Records of these authorizations are maintained per 10 CFR 835.701(a). To assist its operating entities in achieving and maintaining compliance with the requirements of 10 CFR 835, DOE has established its primary regulatory guidance in the DOE Guide 441.1. This series of guides is structured to assist radiation protection professionals in developing the documented radiation protection program required by 10 CFR 835.101 and the supporting site- and facility-specific policies, programs, and procedures that are necessary to ensure compliance with the related regulatory requirements. DOE STD-1098-99, Radiological Control, supplements the DOE Guide 441.1 series of guides and serves as a secondary source of guidance for achieving compliance with 10 CFR 835.

Radiological work permits (RWPs) identify radiological conditions, establish worker protection and monitoring requirements, and contain specific approvals for radiological work activities. The RWP serves as an administrative process for planning and controlling radiological work and informing the worker of the radiological conditions. These written authorizations provide the mechanism to integrate ALARA review of work tasks. General work orders initiated for projects at INTEC include an evaluation of radiological conditions at the area where work is to be performed.

General RWPs are used for entry and repetitive work in areas with known and stable low-hazard radiological conditions, such as within the controlled area of the INTEC fence line. Job-specific RWPs are used for more complex work and for entry into higher-hazard area, such as that associated with Group 1, the Tank Farm Soils. Job-specific RWPs are used to control nonroutine operations or work in areas with changing radiological conditions. The job-specific RWP remains in effect only for the duration of the job.

The detailed procedures for establishing RWPs and the integration of ALARA principles into controlling work within radiological areas are found in

- DOE G 441.1-2, Occupational ALARA Program Guide
- DOE STD-1098-99, Radiological Control.

4.2.5 Personnel Training

Personnel training is an IC that is used to aid in the control of an individual's exposure to hazards at a release site. Training programs are established at INEEL through internal procedures and law requires the programs relevant to accessing a CERCLA release site. It is beyond the scope of this document to provide full procedural requirements of the required training programs. However, an overview of the two most relevant training programs in consideration of accessing the WAG 3, OU 3-13 release sites is provided below. It is the responsibility of the project supervisor for work initiated at INTEC to ensure that personnel who engage in any job effort have the required training prior to commencing work. Additionally, the project supervisor has the authority to deny unescorted access to nuclear facilities and special hazard areas for anyone who does not meet area access training requirements.

4.2.5.1 Radiological Safety Training. Radiation safety training is provided at INEEL to all individuals before being permitted unescorted access to controlled areas or occupationally exposed to ionizing radiation during access to controlled areas, whether escorted or not (10 CFR 835.901(a)).

10 CFR 835 requires that radiation safety training include certain topics, to the extent appropriate to the individual's prior training, work assignments, and degree of exposure to potential radiological hazards (10 CFR 835.901(c)).

To ensure that appropriate radiation safety training is provided to all individuals entering controlled areas, DOE sponsored the development of radiation safety training core course material for General Employee Radiological Training and Radiological Worker Training (RWT). Radiation Worker Training has been developed in a modular format to support two distinct core courses, RWT-I and RWT-II, which includes the material provided in RWT-I, augmented by additional modules on more complex radiation protection issues, such as high radiation area and contaminated area entry and exit controls. Radiation safety refresher training is required every other year.

Detailed radiation training procedures can be found in

- DOE G 441.1-12, Radiation Safety Training Guide
- DOE STD-1098-99, Radiological Control.

4.2.5.2 Occupational Safety and Health Administration. The Occupational Safety and Health Administration (OSHA) requires under 29 CFR 1910.120 any workers performing work involving hazardous waste or hazardous substances complete appropriate levels of Hazardous Waste Operations and

Emergency Response (HAZWOPER) training courses. The following is an outline of the training requirements of OSHA as potentially related to accessing WAG 3, OU 3-13 release sites:

- General site workers (such as equipment operators, general laborers and supervisory personnel) engaged in hazardous substance removal or other activities that expose or potentially expose workers to hazardous substances and health hazards receive a minimum of 40 hours of instruction off the site and a minimum of 3 days actual field experience under the direct supervision of a trained, experienced supervisor.
- Workers onsite only occasionally for a specific limited task (such as groundwater monitoring, land surveying, or geophysical surveying) and who are unlikely to be exposed over permissible exposure limits and published exposure limits receive a minimum of 24 hours of instruction off the site, and the minimum of 1 day actual field experience under the direct supervision of a trained, experienced supervisor.
- Workers regularly onsite who work in areas that have been monitored and fully characterized indicating that exposures are under permissible exposure limits and published exposure limits where respirators are not necessary, and the characterization indicates that there are no health hazards or the possibility of an emergency developing, receive a minimum of 24 hours of instruction off the site, and the minimum of 1 day actual field experience under the direct supervision of a trained, experienced supervisor.
- Administrative workers at INEEL not accessing release sites do not require HAZWOPER training.

As stated, the INEEL has established training programs to implement the requirements of 29 CFR 1910.120. Approved internal procedures aid in identifying and documenting personnel training requirements. It is the responsibility of the project supervisor for work initiated at INTEC to ensure that personnel who engage in any job activity have the required training prior to commencing work.

4.2.6 Soil Disturbance Notification Process

Soil disturbances at INTEC and WAG 3, OU 3-13 are controlled through an NOD process, which is an internal work procedure specific to INTEC. Soil disturbances at INTEC must be conducted within the requirements established under the WAG 3, OU 3-13 ROD to ensure that activities will be performed such that no interference of remedial actions identified in the ROD would occur (exceptions identified in the soil management strategy, Section 5) and that remedies remain operational and functional. The established soil disturbance procedure is required for planned disturbance, excavation, and management of soil within INTEC. It applies to all operations and activities that will result in soil disturbance. The procedure applies to all Bechtel BWXT Idaho and subcontract employees directing or involved in actions that may cause a soil disturbance at a release site at INTEC and within the WAG 3, OU 3-13 defined area of contamination. The overall procedure for initiating a soil disturbance is as follows:

- Review INTEC controlled drawing No. 094752 to determine which release site will be affected by the activity
- Prepare an abbreviated activity summary that includes, at a least
 - Description and location of the activity
 - Soil quantities and maximum depths

- Soil sampling requirements
- Fate of soil
- Prepare a proposed schedule for the activity.

WAG 3, OU 3-13 Environmental Restoration Site Operations personnel are responsible for reviewing the proposed activity and subsequently completing an NOD package (Appendix D). The requestor of the disturbance, in consultation with WAG 3 NOD coordinator, will determine sampling needs that will best represent the level of activity and identify the COCs.

Prior to conducting any site disturbance activities, the Agencies will be notified to the extent of any disturbance and will be provided a plan for their approval, including necessary corrective actions that will be performed to ensure that remedies identified in the ROD remain operational and functional (DOE-ID 1999) and that no interferences of remedial actions identified in the ROD occur. The concurrence process for soil disturbances is detailed in Section 5, Soils Management Strategy.

4.3 Unauthorized Access

Unauthorized access to the INEEL is controlled under the authority given in 10 CFR 860, “Trespassing on Department of Energy Property.” At both the INEEL and the INTEC facilities identification badges are required to enter. Any member of the general public who visits the INEEL or INTEC must pass through visitor control and be escorted by authorized personnel. The INEEL maintains a security force responsible for controlling access to all INEEL facilities. The access control procedures used by the security force can be found in

- DOE Order 470.1 Chg. 1, Safeguards and Security Program
- DOE Order 470.1, Attachment 1, Contractor Safeguards and Security Program Requirements
- DOE M 5632.1C-1, Manual for Protection and Control of Safeguards and Security Interests.

Sites that pose a radiological exposure risk to personnel or visitors are physically and administratively controlled so that only radiologically trained workers can access the sites, as designated under 10 CFR 835, “Occupational Radiation Protection.” Worker exposure is also maintained under the ALARA program. Physical controls for accessing CERCLA release sites posing radiological hazards include warning signs, fences, barriers, and boundary markers detailed in Section 4.1. Administrative controls include obtaining RWPs and personnel training.

The WAG 3 environmental restoration site operations manager is responsible for the posting of WAG 3, OU 3-13 release sites and placement of fences, barriers, and boundary markers as necessary. Radiological Control is responsible for developing general and job-specific RWPs. Project supervisors are responsible for ensuring that personnel receive the required training before starting a project at INTEC in a release site area.

4.4 Response to Failed Controls/Corrective Action

Failed controls are most likely to be found during the annual inspections; however, failed controls may be discovered at any time. Notification to the EPA and the IDHW-DEQ within 48 hours will be made by the DOE upon discovery of any activity that is inconsistent with the OU-specific IC objectives for a site or of any change in the land use or land use designation of a site addressed in the ROD.

Examples of reportable items include (1) the integrity of an engineered or native cover is breached, (2) an unauthorized person accessed a release site with ICs that prohibit unauthorized access, and (3) a release site that is controlled for industrial land use is used for residential activity. The DOE will work together with the EPA and the IDHW-DEQ to determine a plan of corrective action to rectify the situation. If the DOE believes the activity creates an emergency situation, the DOE can respond to the emergency immediately upon notification to the EPA and the IDHW-DEQ and need not wait for any EPA or IDHW-DEQ input to determine a plan of action. The DOE will also identify the root cause of the IC process failure, evaluate how to correct the process to avoid future problems, and implement these changes after consulting with the EPA and the IDHW-DEQ.

Table 4-2 provides the responses to failed control procedures that will be used during DOE control of the INEEL.

4.5 Leasing or Transfer of Property

It is not anticipated that the land within WAG 3, OU 3-13 will be subject to leasing or property transfer up to the year 2095. The Hall Amendment of the National Defense Authorization Act of 1994 (Public Law 103-160) requires concurrence from EPA on the lease of any National Priorities List sites during the period of DOE control, and CERCLA (42 USC 9620 [h][3]) requires that the state be notified of a lease involving contamination. The requirements of the Interim Final Draft Policy Institutional Controls and Transfer of Real Property under CERCLA Section 120(h)(3)(A) (B) or (C) will also be followed (EPA 2000) by DOE.

When DOE no longer manages INEEL activities and controls are needed, CERCLA (42 USC 9620 [h][3]) requires that DOE indicate the presence of contamination and any restrictions in property transfer documentation. If privatization occurs, the land associated with the area or project will be treated as a post-DOE controlled area. Options for leasing or transferring property are summarized in Table 4-3. A summary of the regulatory requirements for leasing or transferring property that govern deeds and covenants are summarized in Table 4-4.

The DOE will notify the EPA and the IDHW-DEQ at least 6 months prior to any WAG 3, OU 3-13 transfer, sale, or lease of any property subject to ICs required by the WAG 3, OU 3-13 ROD so that the EPA and the IDHW-DEQ can be involved in discussions to ensure that appropriate provisions are included in the conveyance documents to maintain effective ICs. If it is not possible for the DOE to notify the EPA and the IDHW-DEQ at least 6 months prior to any transfer, sale, or lease, the DOE will notify the EPA and the IDHW-DEQ as soon as possible, but no later than 60 days prior to the transfer, sale, or lease of any property subject to ICs. INTEC is located on land withdrawn from public domain by Public Land Order 318, dated May 13, 1946. Should DOE-ID return that land to the BLM it would be a “revocation of the withdrawal order.” The following steps would be taken in accordance with 43 CFR 2372.1 to transfer land:

1. Name and address of the holding agency (DOE)
2. Citation of the order that withdrew or reserved the lands for the holding agency (DOE)

Table 4-2. Land use controls and response to failed controls.

Controls	Control Procedures	Surveillance to Ensure Controls in Place	Frequency of Surveillance	Response to Failed Controls
Control of activities	Statement in CFLUP indicating control of activities	Check continued process applicability	Annually until the Agencies agree to modify frequency.	Correct procedural statement.
	WAG 3, OU 3-13 sites included in the INEEL CFLUP	Check INEEL CFLUP for inclusion	Annually or as activities occur until the Agencies agree to modify frequency.	Correct deficiency in INEEL Land Use Plan.
	Procedures that formally review any new activity prior to proceeding	Check continued process applicability	Annually or as activities occur until the Agencies agree to modify frequency.	Correct process or procedure.
	Procedures for soil disturbance	Check continued process applicability	Annually or as activities occur until the Agencies agree to modify frequency. Agencies may request conditions of an NOD at anytime.	Correct process or procedure.
	NEPA environmental checklists required for drilling wells into/through contaminated perched sites and/or aquifers	Check continued process applicability	Annually or as activities occur until the Agencies agree to modify frequency.	Correct process or procedure; if unauthorized drilling is conducted, notify EPA and IDHW-DEQ within 48 hours and correct deficiency.
Access restrictions	Included as part of Remedial Design/Remedial Action	Inspection to ensure signage is in place at appropriate locations	Annually or as activities occur until the Agencies agree to modify frequency.	Correct signage.
	Posted warning signs indicating concerns of the release site			

Table 4-2. (continued).

Controls	Control Procedures	Surveillance to Ensure Controls in Place	Frequency of Surveillance	Response to Failed Controls
Prohibition of unauthorized entry with signs, rope or fences as specified, and guard gates to INEEL	10 CFR 860 (implemented through DOE orders and DOE's management and operating and security manuals)	Check continued process applicability	Annually or as activities occur until the Agencies agree to modify frequency.	Use procedures for conducting investigations of security incidents in 10 CFR 860 (implemented through DOE orders and DOE's management and operating and security manuals); if unauthorized access occurs, notify EPA and the IDHW-DEQ within 48 hours.
Property lease requirements	Procedural statement indicating requirements for property leasing Statement in CFLUP indicating lease requirements	Check continued process applicability and inclusion of sites within the CFLUP	Annually or as activities occur until the Agencies agree to modify frequency.	Correct process or procedures and/or deficiency in the CFLUP.
Property transfer requirements	Procedural statement indicating requirements of property transfer Statement in CFLUP indicating transfer requirement	Check continued process applicability and inclusion of sites within the CFLUP	Annually or as activities occur until the Agencies agree to modify frequency.	Correct process or procedures and/or deficiency in the CFLUP. If industrial restricted land is used as residential, notify EPA and the IDHW-DEQ within 48 hours.

Table 4-3. INEEL National Priority List (NPL) site property closeout options based on legal status and DOE needs.^a

Legal Status/Need	Options					
	Use within DOE	Return to Owner	Relinquish to DOI	Report to GSA	Sell or grant under AEA	Lease under AEA or DOE
Acquired and needed for mission	X					
Privately or state-owned and not needed by DOE		X				
Acquired and not needed by DOE				X	X	X
Acquired and temporarily not needed by DOE						X
Withdrawn and excessed to DOE			X			
Withdrawn and temporarily not needed by DOE						X

a. Modified from DOE-EM (1997).

AEA = Atomic Energy Act DOI = Department of Interior GSA = General Services Administration

3. Legal description and acreage of the lands, except where reference to the order of withdrawal or reservation is sufficient to identify them
4. Description of the improvements existing on the lands
5. The extent to which the lands are contaminated and the nature of the contamination
6. The extent to which the lands have been decontaminated or the measures taken to protect the public from the contamination and the proposals of the holding agency to maintain protective measures (CERCLA 120)
7. The extent to which the lands have been changed in character other than by construction or improvements
8. The extent to which the lands or resources thereon have been disturbed and the measures taken, or proposed to be taken, to recondition the property
9. If improvements on the lands have been abandoned, a certification that the holding agency has exhausted General Services Administration procedures for their disposal and that the improvements are without value
10. A description of the easements or other rights and privileges that the holding agency or its predecessors have granted covering the lands
11. A list of the terms and conditions, if any, that the holding agency deems necessary to be incorporated in any further disposition of the lands in order to protect the public interest
12. Any information relating to the interest of other agencies or individuals in acquiring use of or title to the property or any portion of it
13. Recommendations as to the further disposition of the lands, including, where appropriate, disposition by the General Services Administration.

Table 4-4. Requirements for INEEL property transfer relevant to CERCLA sites.

Under DOE Control							DOE Control Relinquished		
Requirements and Objectives of Closeout		Property Used Within DOE	DOE Leases Property	Property Returned to Private or State Owner	Property Reported to GSA for Disposition	Property Relinquished to DOI	DOE Sells Property		
Objectives of Closeout		Fully identify and document the roles and responsibilities of Environmental Management and the new or existing DOE landlord program office relative to the environmental conditions of the property	Convert the property to its most beneficial use while protecting the interests of DOE and the affected communities	Eliminate DOE's future liability at the site by demonstrating that it has removed all hazardous substances attributable to DOE use of the property Or Limit DOE liability by recording levels of any contaminants or hazardous substances it is leaving on the site as part of the remedial action	Satisfy GSA requirements as efficiently as possible	Satisfy DOI requirements as efficiently as possible	Convert the property to its most beneficial use while protecting the interests of DOE and the affected communities		
Requirements		Source							
Document the NEPA categorical exclusion (CX), as appropriate	Appendix A to Subpart D of 10 CFR 1021	X	X	X	X	X	X		
Complete a NEPA environmental assessment (EA) or environmental impact statement (EIS) if a CX is not appropriate	40 CFR 1500-1516	X	X	X	X	X	X		
Use a Certified Realty Specialist (CRS) to document items and conditions of transfer of assets between DOE programs	DOE Order 430 Section 6g(1)	X							

Table 4-4. (continued).

Requirements and Objectives of Closeout	Source	Under DOE Control		DOE Control Relinquished			
		Property Used Within DOE	DOE Leases Property	Property Returned to Private or State Owner	Property Reported to GSA for Disposition	Property Relinquished to DOI	DOE Sells Property
Deed must include a covenant stating that remedial action is complete (or remedy is demonstrated to be operating properly and successfully) and any subsequent remedial action that is required and is attributable to DOE will be conducted by the U.S.	CERCLA Section 120(h)(3) [42 USC 9620 (h)(3)]			X	X	X	X
If the covenant does not include the warranty that all remedial action has been taken, include the following in the transfer document: restrictions on property use necessary to protect human health and the environment and not interfere with remedial activities, a guarantee that all necessary response actions be taken, identification of schedules for necessary response actions, and assurances that budget requests will be made for response actions.	CERCLA Section 120(h)(3)(C)(ii) [42 USC 9620(h)(3)(C)(ii)]			X	X	X	X

Table 4-4. (continued).

Requirements and Objectives of Closeout		Under DOE Control		DOE Control Relinquished			
		Property Used Within DOE	DOE Leases Property	Property Returned to Private or State Owner	Property Reported to GSA for Disposition	Property Relinquished to DOI	DOE Sells Property
Requirements	Source						
The covenant must include a clause which reserves to the U.S. access to the property in any case in which an investigation, response, or corrective action is found to be necessary after the date of transfer.	CERCLA Section 120(h)(3)(A)(iii)						
	[42 USC 9620 (h)(3)(A)(iii)]			X	X	X	X
Notice of the type and quantity of hazardous substances and the time at which such substances were stored, released, or disposed in the contract for sale or transfer and deed.	CERCLA Section 120(h)(1)-(3)						
	[42 USC 9620 (h)(1)-(3)] 40 CFR 373			X	X	X	X
Notify states of sites to be closed and that are encumbered by a lease beyond the closure date and are contaminated.	CERCLA Section 120(h)(5)						
	[42 USC 9620 (h)(5)]		X				
Consult with and request the concurrence of the EPA Administrator for proposed leases that are on the NPL.	Hall Amendment-Section 3154 of the FY-94 National Defense						
	Authorization Act, (which amends section 646 of the DOE Organization Act [42 USC 7256 (e)(1)-(2)])		X				X

Table 4-4. (continued).

Requirements and Objectives of Closeout	Source	Under DOE Control			DOE Control Relinquished		
		Property Used Within DOE	DOE Leases Property	Property Returned to Private or State Owner	Property Reported to GSA for Disposition	Property Relinquished to DOI	DOE Sells Property
Identify uncontaminated parcels of land.	CERCLA Section 120(h)(4) [42 USC 9620 (h)(4)]			X	X	X	X
Notice of Intent to relinquish property, including extent and nature of contamination and measures which have been and should be taken to protect the public from contamination.	43 CFR 2372.1					X	
Continue to be accountable and responsible for the property until completion of decontamination of the property of all dangerous materials and restoration to a suitable condition; or posting the property, installing protective devices, and agreeing to maintain notices and devices.	43 CFR 2374.2					X	

Table 4-4. (continued).

Requirements and Objectives of Closeout	Source	Under DOE Control			DOE Control Relinquished		
		Property Used Within DOE	DOE Leases Property	Property Returned to Private or State Owner	Property Reported to GSA for Disposition	Property Relinquished to DOI	DOE Sells Property
Property report, which includes history of hazardous substance activity, presence of asbestos and/or PCBs, and easements. Must describe extent of contamination and the extent to which the property can be used without further decontamination.	41 CFR 101-47.202-1, -2, and -7				X		
Determine if reuse is compatible with the Atomic Energy act (AEA) and advances the purposes of the Act.	AEA Section 161(g) (42 USC 2011)		X	X	X	X	X
CRS = Certified Realty Specialist. CX = categorical exclusion. EA = environmental assessment. EIS = environmental impact statement. NEPA = National Environmental Policy Act.							

4.6 Changing/Terminating Institutional Controls

Institutional controls are required as long as land use or access restrictions are necessary to maintain protection of human health and the environment. The adequacy of the continued use of institutional controls for each release site will be evaluated during the IC inspections and the CERCLA 5-year review process. ICs will not be deleted or terminated unless the EPA and the IDHW-DEQ have concurred in the deletion or termination, based on the results of IC inspections or the results of a CERCLA 5-year review. Since the CFLUP lists the required ICs for the WAG 3, OU 3-13 release sites, changes will be documented in the updated CFLUP of the agreement on terminating or changing ICs by the Agencies. In this way, the CFLUP complements the requirements of the ICP in tracking ICs for the release sites.

4.7 Inspection

An initial inspection of the WAG 3, OU 3-13 release sites and NFA sites that have ICs was performed on March 1, 2000. The results of this inspection were recorded in the initial annual report (DOE-ID 2000a). As required by the Section 11.1 of the ROD (DOE-ID 1999), inspections will be conducted at least annually following the initial inspection. Annual inspections have been conducted and reports completed in March 2001 (DOE-ID 2001) and June 2002 (DOE-ID 2002). Appendix E contains the IC Field Inspection Checklists that will be used for the annual inspections.

4.7.1 Facility-wide Documentation Inspection

The INEEL CFLUP provides guidance on facility and land use at the INEEL through the 100-year (year 2095) scenario (DOE-ID 1998b). The CFLUP includes specific information about the INTEC facility. For IC purposes, the CFLUP is to include the following:

- A map based on surveyed coordinates of the institutionally controlled release sites (the maps have been removed from the CFLUP pending resolution of the security concerns discussed in Section 2.3 and Section 4.2.1)
- A list of required ICs for each release site
- The objective of the control or restriction
- The control or restriction
- The time frame that the restrictions apply
- A point of contact.

The CFLUP will be reviewed during IC inspections to determine whether the facility-wide requirements are included in the document.

4.7.2 Visible Access Restrictions Inspection

Visible access restrictions specific to WAG 3, OU 3-13 could include perimeter fencing, barriers, or permanent markers and warning signs. The warning signs are to identify the site concerns and be visible from normal avenues of approach. The following lists the WAG 3, OU 3-13 release site group that require visible access restrictions, as mandated in the ROD.

- Group 1 – Tank Farm Interim Action Sites
- Group 2 – Soils Under Buildings and Structures
- Group 3 – Other Surface Soils
- Group 6 – Buried Cylinders
- Group 7 – Hot Waste Tank System.

Perimeter fencing is chain link fencing that surrounds a release site. Of the waste groups listed above, only the tank farm requires perimeter fencing. The remaining sites associated with the other listed waste groups require warning signs and boundary markers. Fencing or barriers may control certain sites; however, the fencing or barriers will be a voluntary restriction placed for plant operations and are not required by the WAG 3, OU 3-13 ROD.

Each release site will be viewed from all normal avenues of approach to determine whether the appropriate warning signs have been placed. The Institutional Control Field Inspection Checklists (Appendix E) will be used to document the inspection. Additionally, if actions have been taken associated with remediation, site changes, or changes in land-use, take photographs and fill out the “Site Inspection Photo Number Log” for the annual report.

4.7.3 Control of Activities Inspection

Control of activities includes those ICs that deal with administrative controls relating to a release site. These controls for WAG 3, OU 3-13 include

- INEEL Comprehensive Facilities and Land Use Plan
- Public notices
- Environmental checklists
- Work permits
- Personnel training
- Notice of Disturbance reports.

Each of the controls listed above will be reviewed during annual inspections to determine the completeness and adequacy of controlling activities at WAG 3, OU 3-13. Specifically, the INEEL CFLUP will be reviewed to determine whether required information is included as part of the documentation (see Section 4.9). Environmental checklists specific to well drilling within or through perched water zones and or aquifers will be reviewed to determine their adequacy in restricting activities. Notice of Disturbance reports will be reviewed against work authorization documentation and Agency notifications. Additionally, work permits will be randomly selected for WAG 3, OU 3-13 release sites requiring restrictive access to determine their completeness. The training records of personnel accessing certain areas will be randomly spot-checked within work permits to determine whether appropriate training had been received to access the areas.

4.7.4 Unauthorized Access Inspection

In general, the soil release sites contain radionuclides that pose a radiological hazard and possible spread of contamination hazard. These sites are controlled both physically and administratively, as designated under 10 CFR 835, "Occupational Radiation Exposure." Areas must be designated and posted according to the requirements of 10 CFR 835. Additionally, individuals accessing these areas must meet certain training requirements detailed in 10 CFR 835. The following is a list of the WAG 3 OU 3-13 release site groups that require radiological access restrictions, as mandated in the ROD:

- Group 1 – Tank Farm Interim Action Sites
- Group 2 – Soils Under Buildings and Structures
- Group 3 – Other Surface Soils
- Group 6 – Buried Cylinders
- Group 7 – Hot Waste Tank System.

DOE considers the area within the INTEC fence line a Controlled Area. A Controlled Area is an area to which access is managed by or for DOE to protect individuals from exposure to radiation and/or radioactive materials (10 CFR 835.2). Pedestrian access and vehicular access to INTEC is controlled at two separate, manned barricades. Workers or visitors may access INTEC with a current INEEL badge, INEEL Site Access Training, INEEL Environmental Safety and Health and Quality Assurance Training, and, as required under 10 CFR 835, General Employee Radiological Training or Radiological Worker I or II training. Personnel without badging and required training must be escorted.

Most of the 63 release sites that require ICs are within the INTEC fence line. Exceptions to this include CPP-37A, portions of CPP-26 and CPP-22, CPP-67, CPP-95, and the gas cylinder sites, CPP-84 and CPP-94. A separate chain link fence surrounds site CPP-67, Percolation Ponds #1 and #2. Access to the remaining sites, or portions of sites, listed are within the INEEL and are controlled through INEEL security at manned guardhouses along highways.

As part of the inspections, the process of access restriction will be evaluated to determine whether (1) the general public is restricted from unauthorized access to the INEEL, (2) specific access to INTEC is restricted to INEEL badged and trained personnel, and (3) specific access to the Tank Farm release sites and CPP-69 (SFE 20 tank) is restricted.

4.7.5 Notice to Affected Stakeholders

Release sites controlled by ICs require special notification to affected stakeholders prior to any change in land use designation, land-use restriction, or land user. Land-use designation, land-use restrictions, and/or land users are not expected to change up until 2095. However, for inspection purposes, the Community Relations Department will be contacted by the WAG 3 environmental restoration site operations manager to determine whether any notices regarding WAG 3 were issued to stakeholders. Additionally, the CFLUP will be reviewed to determine if land use changes were documented.

4.8 Reporting

The results from the IC inspection will be used to develop the IC monitoring reports. The report will follow the EPA Region 10 IC guidance and will be submitted on an annual basis as stated in Section 11.1 of the ROD (DOE-ID 1999). The outline for the report is provided below:

- Introduction and purpose of the inspection
- Results of field inspection, including checklists and visual inspection results
- Photographs (depicting sites where actions have been taken associated with remediation, site changes, or changes in land use)
- Location maps, including survey coordinates, of each release site (depicting sites where actions have been taken associated with remediation, site changes, or changes in land use)
- Deficiencies
- Improvements.

4.9 Recordkeeping

A set of the records specific to WAG 3, OU 3-13 will be maintained in the WAG 3 project files and the WAG 3 Information Repository. The documentation will include, but not be limited to, the following:

- IC Plan
- Initial six-month IC monitoring report
- Periodic or annual IC monitoring reports
- Five-year remedy review reports.

Responses to failed controls will be included within the IC monitoring reports and the CERCLA 5-year remedy review reports.

4.10 Responsibilities

This section specifies the individuals responsible for the inspections, repairs, reporting, and notifications required for WAG 3, OU 3-13.

4.10.1 DOE-ID, WAG 3, OU 3-13 Project Manager

The DOE-ID WAG 3 remediation project manager is responsible for the following:

- Ensuring the IC activities are performed in accordance with the approved IC Plan
- Coordinating the activities of the INEEL operating contractor at WAG 3, OU 3-13
- Contacting the EPA and IDHW-DEQ of failed ICs requiring such notification
- Initiating contact with the INEEL contractor Community Relations Department regarding land-use changes and notifications of drilling restrictions.

4.10.2 INEEL Contractor WAG 3, OU 3-13 Project Manager

As the point of contact for IC activities, the INEEL contractor WAG 3, OU 3-13 project manager will be responsible for the following:

- Implementation of inspections using personnel trained to the requirements of the approved IC Plan
- Providing updated IC and release site information to the CFLUP coordinator of the Land and Facilities Operations Department, as required
- Ensuring document control of IC plans, IC monitoring reports, and CERCLA 5-year remedy review reports, including their placement in the project records file and in the Information Repository
- Submitting of IC monitoring reports to DOE-ID, EPA, and the IDHW-DEQ.

4.10.3 INEEL Contractor WAG 3, OU 3-13 Site Operations Manager

As the point of contact specific to site operations and environmental restoration, the INEEL contractor WAG 3, OU 3-13, environmental restoration site operations manager is responsible for the following:

- Reviewing and submitting, if appropriate, NOD packages
- Coordinating with the WAG 3, OU 3-13 project manager in implementing ICs
- Coordinating with the WAG 3, OU 3-13 project manager regarding IC inspections, document control, and providing updated release site information for inclusion in the CFLUP.

4.10.4 INEEL Contractor CFLUP Coordinator

The INEEL contractor CFLUP coordinator of the Land and Facilities Operations Department will be responsible for the following:

- Coordinating with the INEEL contractor WAG 3, OU 3-13 project manager and site operations manager regarding land use changes and IC changes
- Updating the CFLUP with new or modified information concerning WAG 3, OU 3-13 release sites
- Ensuring the updated CFLUP is made available to the public at the INEEL web site www.inel.gov.

5. SOILS MANAGEMENT STRATEGY

This section identifies a soils management strategy for all soils within INTEC and identified by the OU 3-13 ROD that may need to be managed during the institutional control period for the facility. There are eight groups of soils applicable to this strategy, which include

1. No Further Action sites, which may be disturbed during routine maintenance and operational functions
2. Group 1 – Tank Farm Interim Action Soils
3. Group 2 – Soils Under Buildings and Structures
4. Group 3 – Other Surface Soils
5. Group 4 – Perched Water
6. Group 5 – Snake River Plain Aquifer
7. Group 6 – Buried Gas Cylinders
8. Group 7 – SFE-20 Hot Waste Tank System.

In addition to these soil groups, other CERCLA activities may generate investigation-derived waste (IDW) that requires management (from activities supporting pre-ROD investigations pursuant to the FFA/CO). Investigation-derived waste will be addressed in applicable Waste Management Plans and Monitoring Systems Installation Plans.

The soils management strategy addresses three general criteria:

1. The OU 3-13 ROD-established soils management in relation to CERCLA processes
2. Activities consistent with the OU 3-13 ROD
3. Avoidance of interference with OU 3-13 ROD-selected remedies.

5.1 Applicable Definitions

For purposes of this soils management strategy, the following definitions apply:

CERCLA Site – Any site identified in the FFA/CO, including those listed in the OU 3-13 ROD and those established for OU 3-14.

CERCLA Activity – An activity that is determined through the soil management strategy as being consistent with FFA/CO programs and/or OU 3-13 ROD-established remedies.

Group 3 Site Similarity – Sites having similar soil characteristics and similar contaminants of potential concern (COPCs) as Group 3 soils.

Institutional Controls – Institutional controls as applied to the soils management strategy is defined as the management of soils/debris that do not exhibit contamination levels above those

established for No Further Action sites in the OU 3-13 ROD. Management of this material includes the replacement of excavated soils/debris into a disturbed area.

RCRA Closure – Any unit subject to the closure requirements of 40 CFR 264, Subpart G, or 40 CFR 265, Subpart G.

SSSTF/ICDF Candidate – Soils/debris not returned to a disturbance area as a result of CERCLA activities that may be staged and subsequently managed in the Staging, Storage, Sizing, and Treatment Facility (SSSTF), if necessary, with ultimate disposal in the ICDF.

Unexpected Contamination – Material that is disturbed beyond that of the boundary of a CERCLA site exceeding established field-screening levels (i.e., Group 3 Remediation Goals).

5.2 Regulatory Determinations

The INTEC facility has multiple regulatory requirements, including that of the Hazardous Waste Management Act (HWMA), some of which overlap in jurisdiction. This was recognized during the FFA/CO negotiation and the OU 3-13 ROD development. To limit the duplication of regulatory requirements, defining language was included in the both the FFA/CO and the OU 3-13 ROD. The language agreed upon within the FFA/CO (DOE-ID 1991) is

This Agreement integrates the U.S. DOE's CERCLA response obligations and RCRA and HWMA corrective action obligations at INEL which relate to release(s) of hazardous substances covered by this Agreement. Compliance with activities required by this Agreement will be deemed to: achieve compliance with CERCLA, 42 U.S.C. §9601, *et. seq.*; satisfy the corrective action requirements of Sections 3004(u) and (v) of RCRA, 42 U.S.C. §§ 6924(u) and (v), for a RCRA permit, and Section 3008(h), 42 U.S.C. § 6928(h), for interim status facilities; satisfy the corrective action requirements of HWMA; and meet or exceed all applicable or relevant and appropriate federal and state laws and regulations to the extent required by Section 121 of CERCLA, 42 U.S.C. § 9621.

Based upon the foregoing, the Parties intend that any response action selected, implemented, and completed under this Agreement will be protective of human health and the environment such that remediation of releases covered by this Agreement shall obviate the need for further response action under federal or state law.^a

The language agreed upon within the OU 3-13 ROD is (DOE-ID 1999):

The ROD also recognizes that contaminated soil sites addressed under this ROD may be disturbed through maintenance or upgrade activities associated with INTEC operations during the period before the CERCLA remedies are fully implemented. These contaminated soils will be considered CERCLA remediation

a. FFA/CO Sections 5.1 and 5.2.

waste, as the removal and subsequent storage or disposal of any contaminated soil represents progress toward cleanup.^b

As indicated by the language given in the enforceable documents, this soils management strategy recognizes that soils/debris resulting from CERCLA activities will be managed under ICs for those soils having contamination levels below OU 3-13 ROD-established remediation goals or as SSSTF/ICDF candidate material.

The SSSTF/ICDF Complex consists of landfills, surface impoundment(s), chemical and physical treatment, and storage and staging activities as created under the OU 3-13 ROD for the sole purpose of managing CERCLA wastes within the INEEL boundaries. This is described in both the Declaration and in Sections 9.3 and 11.1.3 of the OU 3-13-ROD, as well as the associated administrative record. On-Site activities are described to include wastes generated from CERCLA actions specifically described under OU 3-13 and at other noncontiguous facilities^c within the INEEL boundaries, specifically at other waste area groups (WAGs) and operable units (OUs), e.g., Group 3 soils under OU 3-13 or contaminated soils from OU 1-10. CERCLA wastes generated within the INEEL boundary and identified for management in the ICDF under a National Contingency Plan (NCP) authorized action are, therefore, considered to be “on-site” as that term is described at 40 CFR 300.400 (e)(1). This on-Site management in the SSSTF/ICDF Complex is limited to CERCLA removal actions authorized by DOE, EPA- and DOE-signed and State of Idaho-concurred CERCLA RODs specifying on-Site remedial action, and SSSTF/ICDF secondary wastes and IDW pursuant to the Agencies-approved work plans under the December 1991 FFA/CO. Wastes generated from DOE operational activities are excluded from management in the SSSTF/ICDF Complex unless there is a written Agencies decision identifying such action as encompassed by a ROD-based remedial activity or a FFA/CO-approved investigation work plan.

Figure 5-1 depicts the process for soil and debris management resulting from CERCLA activities that will be encountered within OU 3-13.

5.2.1 No Action Sites and No Further Action Sites

The No Action sites are not considered CERCLA soils.

The No Further Action sites are considered remediation sites during the institutional control period. If a soil disturbance occurs within a No Further Action site, the soil will be managed in accordance with Figure 5-1, with ultimate disposal to the ICDF, if required as a result of exceeding remediation goals.

5.2.2 Group 1—Tank Farm Interim Action Soils

Tank farm interim action soils are associated with the Group 1 remedial actions, such as the run-on diversion channels and surface sealing the tank farm soils. Excess soil generated prior to the installation of the polyurea liner will be staged within the tank farm fence and potentially used for grading during the interim action. Staged soil will be subject to ALARA principles regarding exposure. Soils exhibiting excessive radiological hazards may not be used for grading purposes. Soil disturbance within the tank farm after liner installation and liner maintenance conducted prior to OU 3-14 remedial action (approximately 2007) will be conducted according to the Group 1 Operations and Maintenance Plan (to be prepared).

b. OU 3-13 ROD pg. 11-13, Description of Selected Remedies.

c. (See 55 FR 46, March 8, 1990, for a discussion of noncontiguous facilities.)

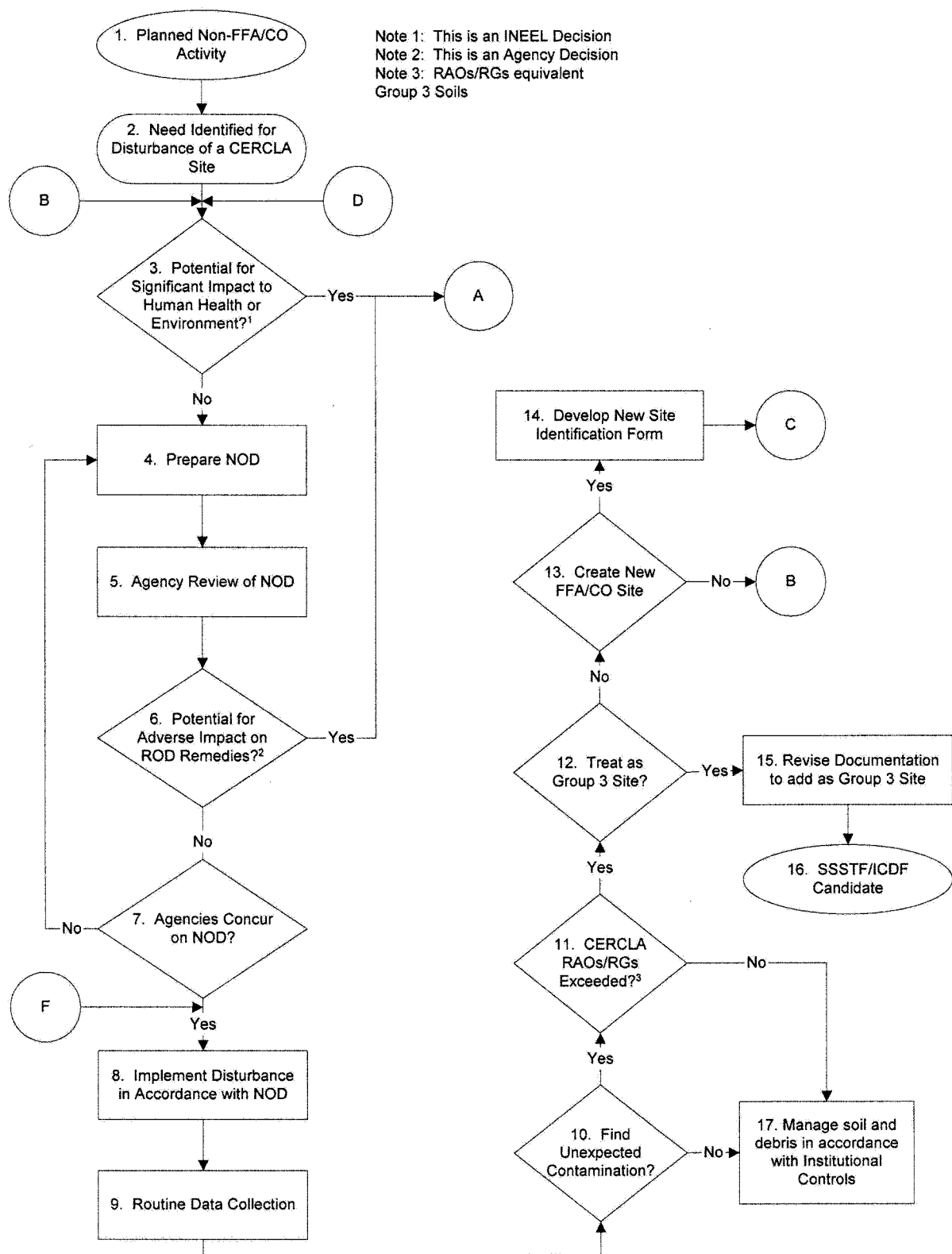


Figure 5-1. Managing soils and debris under the OU 3-13 ROD.

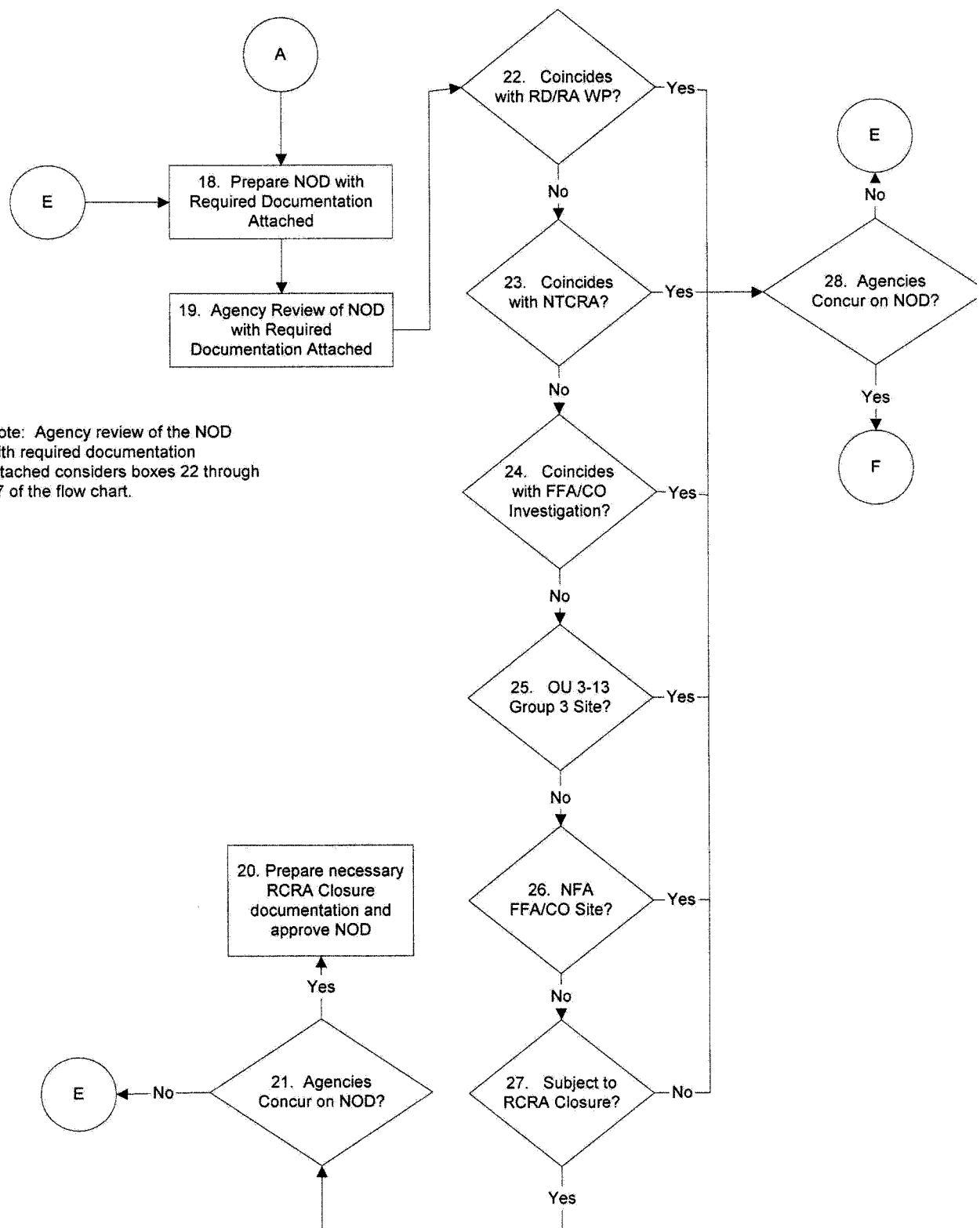


Figure 5-1. (continued).

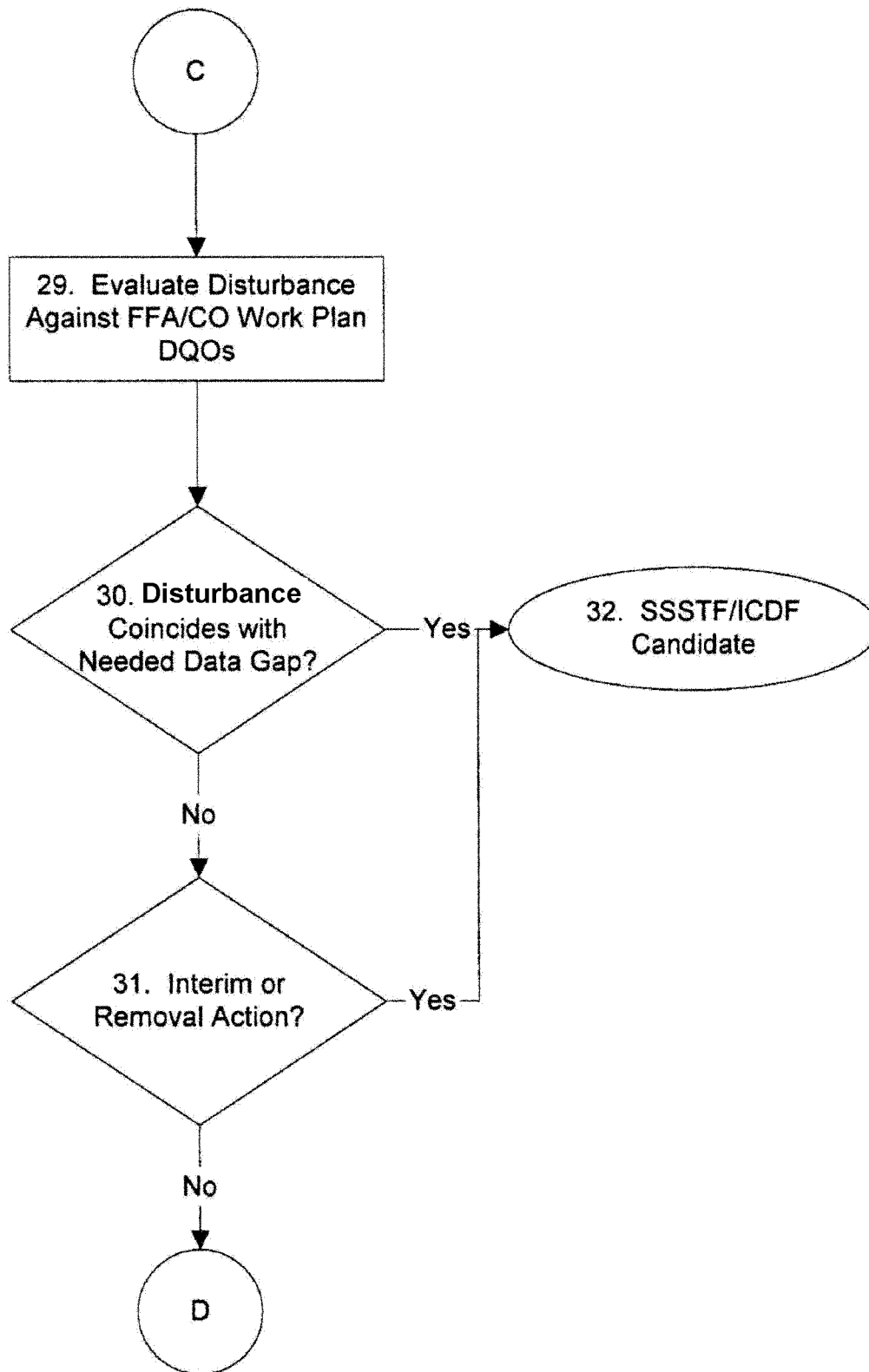


Figure 5-1. (continued).

5.2.3 Group 2 Soils—Soils Under Buildings and Structures

Some of the sites listed in Group 2 may extend beyond structures and buildings. If a soil disturbance occurs where the site extends beyond the building, the soils will be managed per the soils management strategy flowchart (Figure 5-1). Additionally, following completion of a D&D&D activity, disturbed exposed soils will be managed per the soils management flowchart (Figure 5-1).

5.2.4 Group 3 Soils—Other Surface Soils

The selected remedy for Group 3 soils is disposal on-Site at the ICDF. Those sites that are disturbed prior to the construction of the ICDF will be managed within the CERCLA area of contamination (DOE-ID 1999). Short-term risks and contaminant migration will be managed according to a Group 3 Waste Management Plan (to be prepared).

5.2.5 Group 4—Perched Water

Remediation-derived waste, such as drill cuttings, will be managed according to the Group 4 Monitoring System and Installation Plan (DOE-ID 2000b).

5.2.6 Group 5—Snake River Plain Aquifer

Remediation-derived waste, such as drill cuttings, will be managed according to the Group 5 Monitoring System and Installation Plan (DOE-ID 2000c).

5.2.7 Group 6—Buried Gas Cylinders

If, during the removal of the buried gas cylinders, soil above the Remedial Goals is encountered, these soils will be managed per the soils management flowchart (Figure 5-1).

5.2.8 Group 7—SFE-20 Hot Waste Tank

The ROD remedial action for this unit involves removing the hot waste tank. Soils from the tank remedial action will have to be excavated. This soil will be considered other debris and disposed of in the ICDF unless it cannot meet the Waste Acceptance Criteria (WAC). If this should be the case, it will be disposed off-Site along with other components that cannot meet the WAC (DOE-ID 1999).

6. REFERENCES

- 10 CFR 835, 2002, "Occupational Radiation Protection," *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 10 CFR 835.2, 2002, "Definitions," *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 10 CFR 835.101, 2002, "Radiation Protection Programs," *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 10 CFR 835.501, 2002, "Radiological Areas," *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 10 CFR 835.701, 2002, General Provisions, " *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 10 CFR 835.901, 1999, "Radiation Safety Training," *Code of Federal Regulations*, Office of the Federal Register, July 1999.
- 10 CFR 860, 2002, "Trespassing on Department of Energy Property," *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 10 CFR 1021, 2002, "National Environmental Policy Act Implementing Procedures," *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 10 CFR 1021, Subpart D, 2002, "Typical Classes of Actions," *Code of Federal Regulations*, Office of the Federal Register, January 2002.
- 29 CFR 1910.120, 2002, "Hazardous Waste Operations and Emergency Response," *Code of Federal Regulations*, Office of the Federal Register, July 2002.
- 40 CFR 264, Subpart G, 2001, "Closure and Post-Closure," *Code of Federal Regulations*, Office of the Federal Register, July 2001.
- 40 CFR 265, Subpart G, 2001, "Closure and Post-Closure," *Code of Federal Regulations*, Office of the Federal Register, July 2001.
- 40 CFR 300, 2002, "National Oil and Hazardous Substances Pollution Contingency Plan," *Code of Federal Regulations*, Office of the Federal Register, July 2002.
- 40 CFR 300.400, 2001, "General," *Code of Federal Regulations*, Office of the Federal Register, July 2001.
- 40 CFR 373, 2001, "Reporting Hazardous Substance Activity When Selling or Transferring Federal Real Property," *Code of Federal Regulations*, Office of the Federal Register, July 2001.
- 40 CFR 1500-1516, Chapter V, 2002, "Council on Environmental Quality," *Code of Federal Regulations*, Office of the Federal Register, July 2002.

- 41 CFR 101-47.202-1, 2002, “Reporting Requirements,” *Code of Federal Regulations*, Office of Federal Register, July 2002.
- 41 CFR 101-47.202-2, 2002, “Report Forms,” *Code of Federal Regulations*, Office of Federal Register, July 2002.
- 41 CFR 101-47.202-7, 2002, “Reports Involving Contaminated Property,” *Code of Federal Regulations*, Office of Federal Register, July 2002.
- 43 CFR 2372.1, 2001, “Notice of Intention to Relinquish Action by Holding Agency,” *Code of Federal Regulations*, Office of Federal Register, October 2001.
- 43 CFR 2374.2, 2001, “Conditions of Acceptance by BLM,” *Code of Federal Regulations*, Office of Federal Register, October 2001.
- 54 FR 134, 1989, “National Priorities List,” *Federal Register*, Environmental Protection Agency, p. 29820, July 14, 1989.
- 55 FR 46, 1990, “Noncontiguous Facilities,” *Federal Register*, Environmental Protection Agency, p. 8690, March 8, 1990.
- 42 USC 103, Subchapter I, Section 9620, 1986, “Federal Facilities,” as amended, *United States Code*.
- 42 USC § 2011 et seq., 1954, “Atomic Energy Act of 1954,” as amended, *United States Code*.
- 42 USC § 6901 et seq., 1976, “Resource Conservation and Recovery Act (Solid Waste Disposal Act),” *United States Code*.
- 42 USC § 9601 et seq., 1980, “Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA/Superfund),” *United States Code*.
- Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 1986, Section 120 Paragraph (h) (3) (A), (B), or (C), “Institutional Controls and Transfer of Real Property,” October 1986. (see 42 USC 103)
- DOE G 441.1, 1996, “DOE Radiological Health and Safety Policy,” U. S. Department of Energy, April 26, 1996.
- DOE G 441.1-2, 1999, “Occupational ALARA Program Guide,” U. S. Department of Energy, March 17, 1999.
- DOE G 441.1-12, 1999, “Radiation Safety Training Guide,” U. S. Department of Energy, March 17, 1999.
- DOE M 5632.1C-1, Change 1, 1996, “Manual for Protection and Control of Safeguards and Security Interests,” U. S. Department of Energy, April 10, 1996.
- DOE O 430, 1996, “Land and Facility Use Planning,” U. S. Department of Energy, July 9, 1996.
- DOE O 451.1B, Change 1, 2001, “National Environmental Policy Act Compliance Program,” U. S. Department of Energy, September 28, 2001.

- DOE O 470.1, 1995, "CRD Contractor Safeguards and Security Program Requirements," U. S. Department of Energy, September 28, 1995.
- DOE O 1230.2, 1992, "American Indian Tribal Government Policy," U. S. Department of Energy, April 8, 1992.
- DOE O 5400.5, Change 2, 1993, "Radiation Protection of the Public and the Environment," U. S. Department of Energy, January 7, 1993.
- DOE-EM, 1997, *Small Site Summary Guide to Closeout Requirements*, DOE/EM-0333, Department of Energy, Office of Environmental Management, October 1997.
- DOE-ID, 1991, *Federal Facility Agreement and Consent Order for the Idaho National Engineering Laboratory*, U.S. Department of Energy Idaho Field Office, U.S. Environmental Protection Agency Region 10, Idaho Department of Health and Welfare.
- DOE-ID, 1996, *INEL Comprehensive Facility and Land Use Plan*, DOE/ID-10514, Rev. 0, Department of Energy Idaho Operations Office, March 1996.
- DOE-ID, 1997a, *Comprehensive RI/FS for the Idaho Chemical Processing Plant OU 3-13 at the INEEL-Part A- RI/BRA Report (Final)*, DOE/ID-10534, Rev. 0, U.S. Department of Energy Idaho Operations Office, November 1997.
- DOE-ID, 1997b, *Comprehensive RI/FS for the Idaho Chemical Processing Plant OU 3-13 at the INEEL-Part B- FS Report (Final)*, DOE/ID-10572, Rev. 0, U.S. Department of Energy Idaho Operations Office, November.
- DOE-ID, 1998a, *Comprehensive RI/FS for the Idaho Chemical Processing Plant OU 3-13 at the INEEL-Part B, FS Supplemental Report*, DOE/ID-10619, Rev. 2, U.S. Department of Energy Idaho Operations Office, October 1998.
- DOE-ID, 1998b, *Proposed Plan for Waste Area Group 3 at the Idaho Chemical Processing Plant*, Idaho National Engineering and Environmental Laboratory, U.S. Department of Energy Idaho Operations Office, U.S. Environmental Protection Agency, Idaho Department of Health and Welfare, October 1998.
- DOE-ID, 1999, *Final Record of Decision, Idaho Nuclear Technology and Engineering Center*, U.S. Department of Energy Idaho Operations Office, U.S. Environmental Protection Agency, Idaho Department of Health and Welfare, DOE/ID-10660, Rev. 0, October 1999.
- DOE-ID, 2000a, *Initial Institutional Controls Monitoring Report for Operable Unit 3-13*, DOE/ID-10751, Rev. 0, U.S. Department of Energy Idaho Operations Office, May 2000.
- DOE-ID, 2000b, *Monitoring System and Installation Plan for Operable Unit 3-13, Group 4, Perched Water Well Installation*, DOE/ID-10774, Rev. 0, U.S. Department of Energy Idaho Operations Office, September 2000.
- DOE-ID, 2000c, *Monitoring System and Installation Plan for Operable Unit 3-13, Group 5, Snake River Plain Aquifer*, DOE/ID-10782, Rev. 1, U.S. Department of Energy Idaho Operations Office, November 2000.

- DOE-ID, 2001, *The 2001 Institutional Controls Monitoring Report for Operable Unit 3-13*, DOE/ID-10883, Rev. 1, U.S. Department of Energy Idaho Operations Office, July 2001.
- DOE-ID, 2002, "The 2002 Institutional Controls Monitoring Report for Operable Unit 3-13," DOE/ID-11033, Rev. 0, U.S. Department of Energy Idaho Operations Office, October 2002.
- DOE-STD-1098-99, 1999, "Radiological Control," U. S. Department of Energy, July 1999.
- EPA, 1999, "Region 10 Policy on the Use of Institutional Controls at Federal Facilities," Office of Environmental Cleanup, Office of Waste and Chemicals Management, and Office of Regional Counsel, Seattle, Washington, May 1999.
- EPA, 2000, *Institutional Controls – Transfer of Real Property Under CERCLA Section 120 (h) (3) (A), (B) or (C)*, Environmental Protection Agency, February 2000.
- EPA, 2001, "The Comprehensive Five-Year Review Guidance," OSWER Directive 9355.7-03B-P, EPA 540-R-01-007, Office of Emergency and Remedial Response, Environmental Protection Agency, June 2001. (This replaces OSWER Directive 9355.7-02A, "Supplemental Five-Year Review Guidance," July 1994)
- HWMA, 1983, "Hazardous Waste Management Act of 1983," Idaho Code Sections 39-4401 et seq., 1983.
- IDAPA 37.03.09.25, 1993, "Construction of Cold Water Wells," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality, July 1993.
- IDAPA 58.01.08.551.06, 1992, "Construction," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality, December 1992.
- Public Land Order 318, May 13, 1946. (see Executive Order EO-9701 and 11 FR 5745, *Federal Register*)
- Public Law 103-160, Title XXXI, Subtitle D, Section 3154, "Hall Amendment - Leasing Property," National Defense Reauthorization Act for Fiscal Year 1994, November 1993.
- STD-101, 2001, "Integrated Work Control Process," Rev. 12, Site Maintenance, Idaho National Engineering and Environmental Laboratory, Idaho Falls, Idaho, September 2001.